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Architectural Appointments Wanted and Vacant

No. 3206] [Vol. 124

THE ARCHITECTURAL PRESS

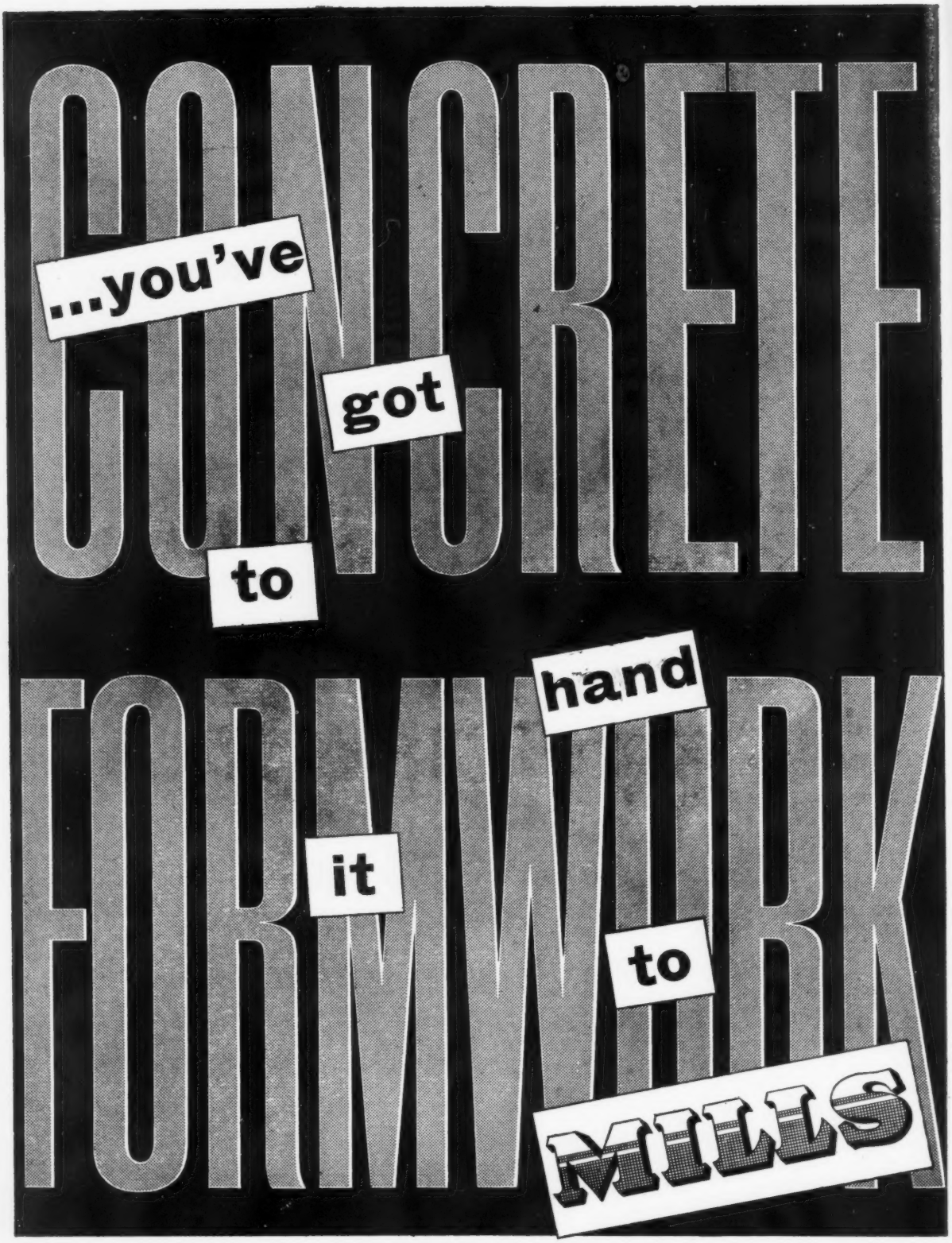
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★ A glossary of abbreviations of Government Departments and Societies and Committees of all kinds, together with their full address and telephone numbers. The glossary is published in two parts—A to Ie one week, Ih to Z the next. In all cases where the town is not mentioned the word LONDON is implicit in the address.

IHVE	Institution of Heating and Ventilating Engineers. 49, Cadogan Square.	Sloane 1601/3158
IIBDID	Incorporated Institute of British Decorators and Interior Designers. 100, Park Street, Grosvenor Square, W.1.	Mayfair 7086
ILA	Institute of Landscape Architects, 2, Guilford Place, W.C.1.	Holborn 0281
I of Arb	Institute of Arbitrators. Hastings House, 10, Norfolk Street, Strand, W.C.2.	Temple Bar 4071
IOB	Institute of Builders. 48, Bedford Square, W.C.1.	Museum 7197
IQS	Institute of Quantity Surveyors. 98, Gloucester Place, W.1.	Welbeck 1859
IR	Institute of Refrigeration. Dalmeny House, Monument Street, E.C.3.	Avenue 6851
IRA	Institute of Registered Architects. 47, Victoria Street, S.W.1.	Abbey 6172
ISE	Institute of Structural Engineers. 11, Upper Belgrave Street, S.W.1.	Sloane 7128
LDA	Lead Development Association. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
LMBA	London Master Builders' Association. 47, Bedford Square, W.C.1.	Museum 3891
LSPC	Lead Sheet and Pipe Council. Eagle House, Jermyn Street, S.W.1.	Whitehall 7264/4175
MAFF	Ministry of Agriculture, Fisheries and Food. Whitehall Place, S.W.1.	Trafalgar 7711
MARS	Modern Architectural Research Group (English Branch of CIAM). Secretary: Trevor Dannatt, A.R.I.B.A., 71, Blandford Street, W.1.	Welbeck 4713
MOE	Ministry of Education. Curzon Street House, Curzon Street, W.1.	Mayfair 9400
MOH	Ministry of Health. 23, Savile Row, W.1.	Regent 8411
MOHLG	Ministry of Housing and Local Government. Whitehall, S.W.1.	Whitehall 4300
MOLNS	Ministry of Labour and National Service. 8, St. James' Square, S.W.1.	Whitehall 6200
MOS	Ministry of Supply. Shell Mex House, W.C.2.	Gerrard 6933
MOT	Ministry of Transport. Berkeley Square House, Berkeley Square, W.1.	Mayfair 9494
MOW	Ministry of Works. Lambeth Bridge House, S.E.1.	Reliance 7611
NAMMC	Natural Asphalte Mine Owners and Manufacturers Council. 94/98, Petty France, S.W.1.	Abbey 1010
NAS	National Association of Shopfitters. 9, Victoria Street, S.W.1.	Abbey 4813
NBR	National Buildings Record. 31, Chester Terrace, Regent's Park, N.W.1.	Welbeck 0619
NCBMP	National Council of Building Material Producers. 10 Storey's Gate, S.W.1.	Abbey5111
NEFMAI	National Employers Federation of the Mastic Asphalt Industry. 21, John Adam Street, Adelphi, W.C.2.	Trafalgar 3927
NFBTE	National Federation of Building Trades Employers. 82, New Cavendish Street, W.1.	Langham 4041/4054
NFBTO	National Federation of Building Trades Operatives. Federal House, Cedars Road, Clapham, S.W.4.	Macaulay 4451
NFHS	National Federation of Housing Societies. 12, Suffolk St., S.W.1.	Whitehall 1693
NHBRC	National House Builders Registration Council. 82, New Cavendish Street, W.1.	Langham 4341
NPL	National Physical Laboratory. Head Office, Teddington.	Molesey 1380
NRDB	Natural Rubber Development Board. Market Buildings, Mark Lane, E.C.3.	Mansion House 9383
NSAS	National Smoke Abatement Society. Palace Chambers, Bridge Street, S.W.1.	Trafalgar 6838
NT	National Trust for Places of Historic Interest or Natural Beauty. 42, Queen Anne's Gate, S.W.1.	Whitehall 0211
PEP	Political and Economic Planning. 16, Queen Anne's Gate, S.W.1.	Whitehall 7245
RCA	Reinforced Concrete Association. 94, Petty France, S.W.1.	Abbey 4504
RIAS	Royal Incorporation of Architects in Scotland. 15, Rutland Square, Edinburgh.	Fountainbridge 7631
RIBA	Royal Institute of British Architects. 66, Portland Place, W.1.	Langham 5721
RICS	Royal Institution of Chartered Surveyors. 12, Great George Street, S.W.1.	Whitehall 5322/9242
RFAC	Royal Fine Art Commission. 5, Old Palace Yard, S.W.1.	Whitehall 3935
RS	Royal Society. Burlington House, Piccadilly, W.1.	Regent 3335
RSA	Royal Society of Arts. 6, John Adam Street, W.C.2.	Trafalgar 2366
RSH	Royal Society of Health. 90, Buckingham Palace Road, S.W.1.	Sloane 5134
RIB	Rural Industries Bureau. 35, Camp Road, Wimbledon, S.W.19.	Wimbledon 5101
SBPM	Society of British Paint Manufacturers. Grosvenor Gardens House, Grosvenor Gardens, S.W.1.	Victoria 2186
SE	Society of Engineers. 17, Victoria Street, Westminster, S.W.1.	Abbey 7244
SFMA	School Furniture Manufacturers' Association. 30, Cornhill, London, E.C.3.	Mansion House 3921
SIA	Society of Industrial Artists. 7, Woburn Square, London, W.C.1.	Langham 1984/5
SIA	Structural Insulation Association. 32, Queen Anne Street, W.1.	Langham 7616
SNHTPC	Scottish National Housing. Town Planning Council. Hon. Sec., Robert Pollock, Town Clerk, Rutherglen	
SPAB	Society for the Protection of Ancient Buildings. 55, Great Ormond Street, W.C.1.	Holborn 2646
TCPA	Town and Country Planning Association. 28, King Street, Covent Garden, W.C.2.	Temple Bar 5006
TDA	Timber Development Association. 21, College Hill, E.C.4.	City 4771
TPI	Town Planning Institute. 18, Ashley Place, S.W.1.	Victoria 8815
TTF	Timber Trades Federation. 75, Cannon Street, E.C.4.	City 5040
WDC	War Damage Commission. 6, Carlton House Terrace, S.W.1	Whitehall 4341
ZDA	Zinc Development Association. 34, Berkeley Square, W.1.	Grosvenor 6636



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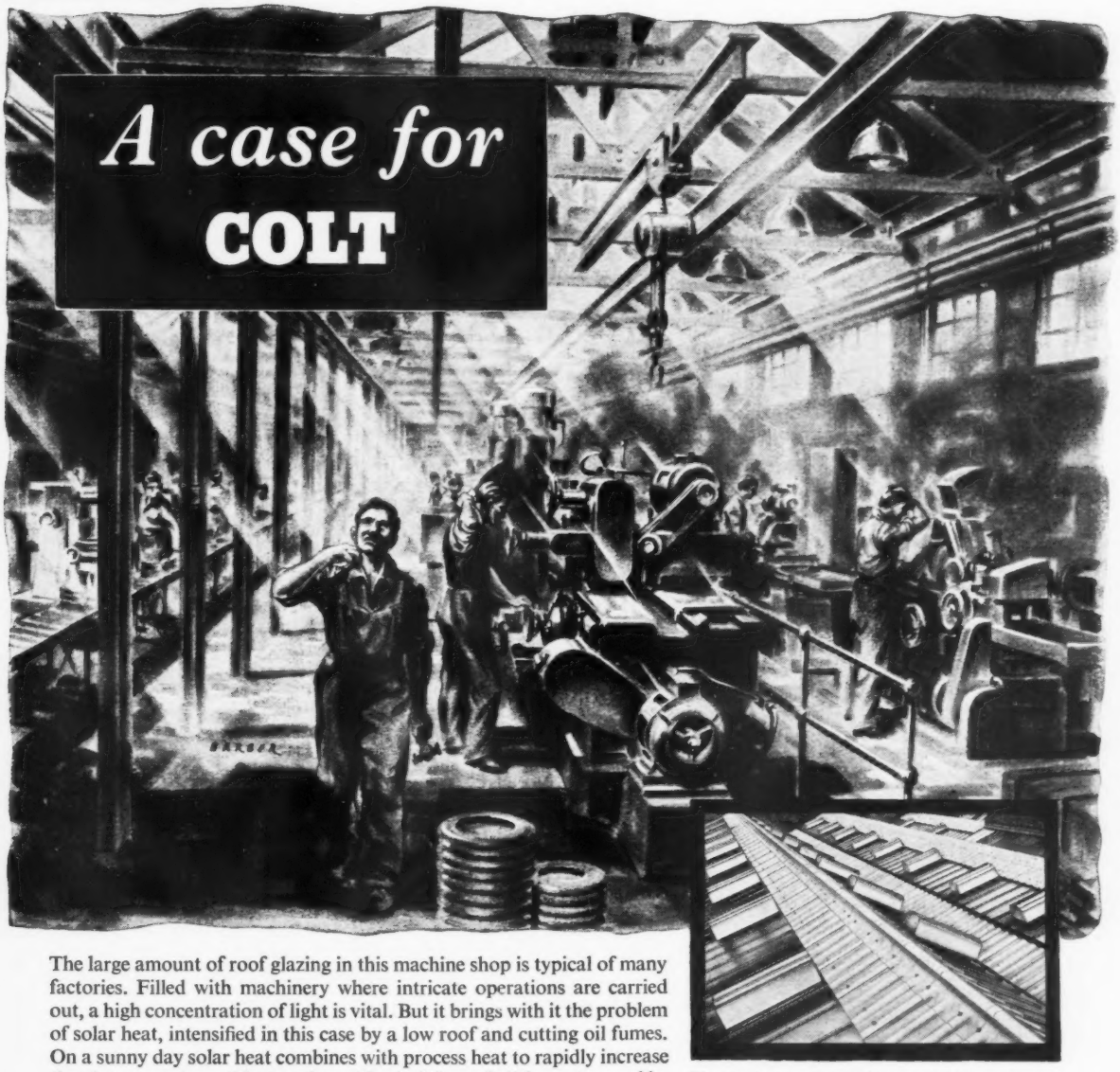
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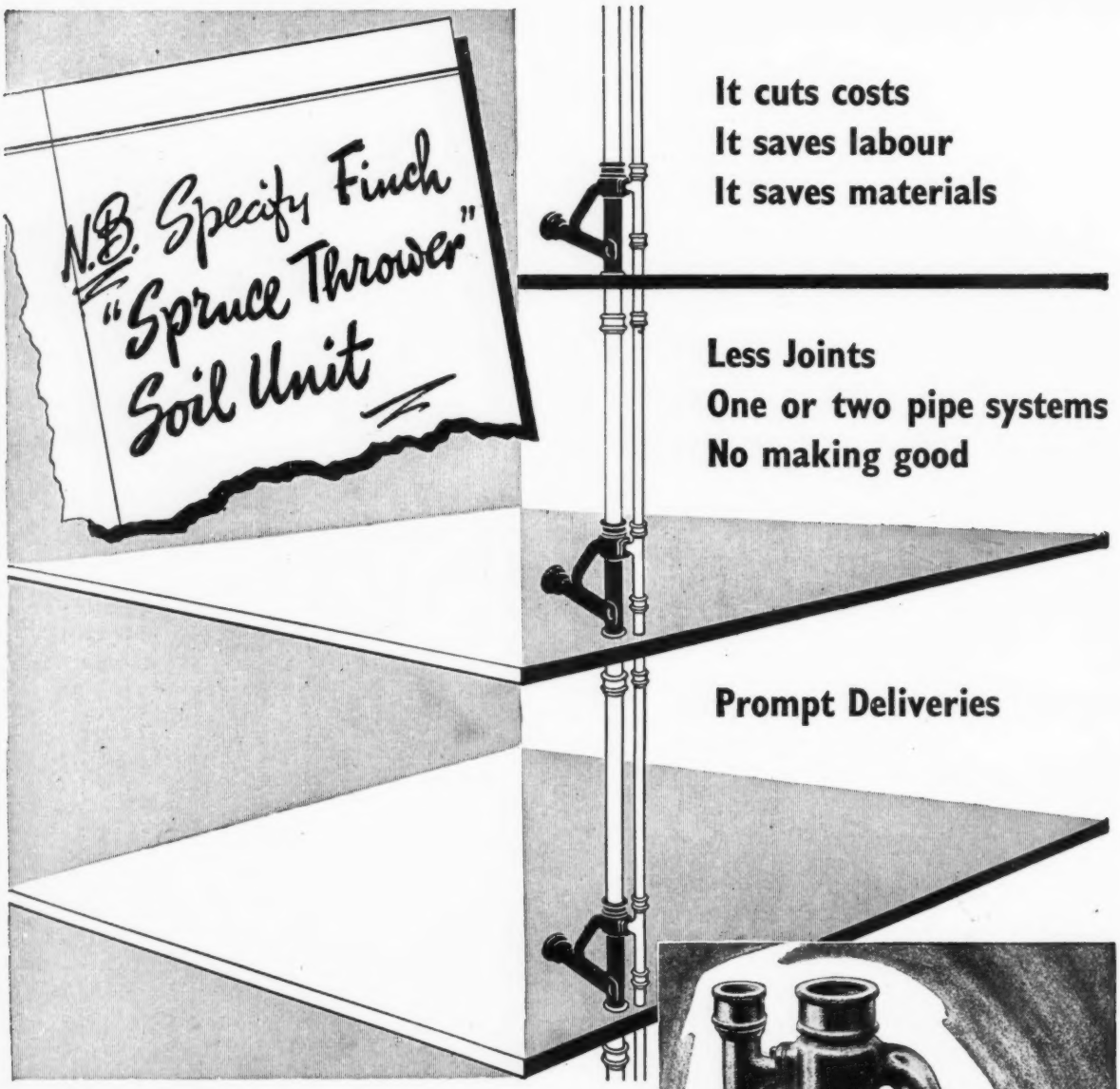
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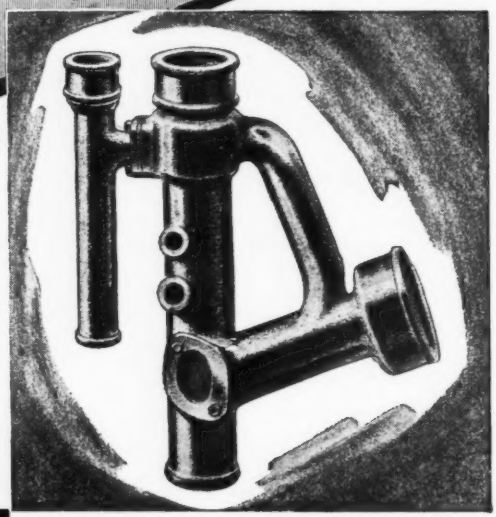
G.104



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Architect: W. E. Gott, Esq.

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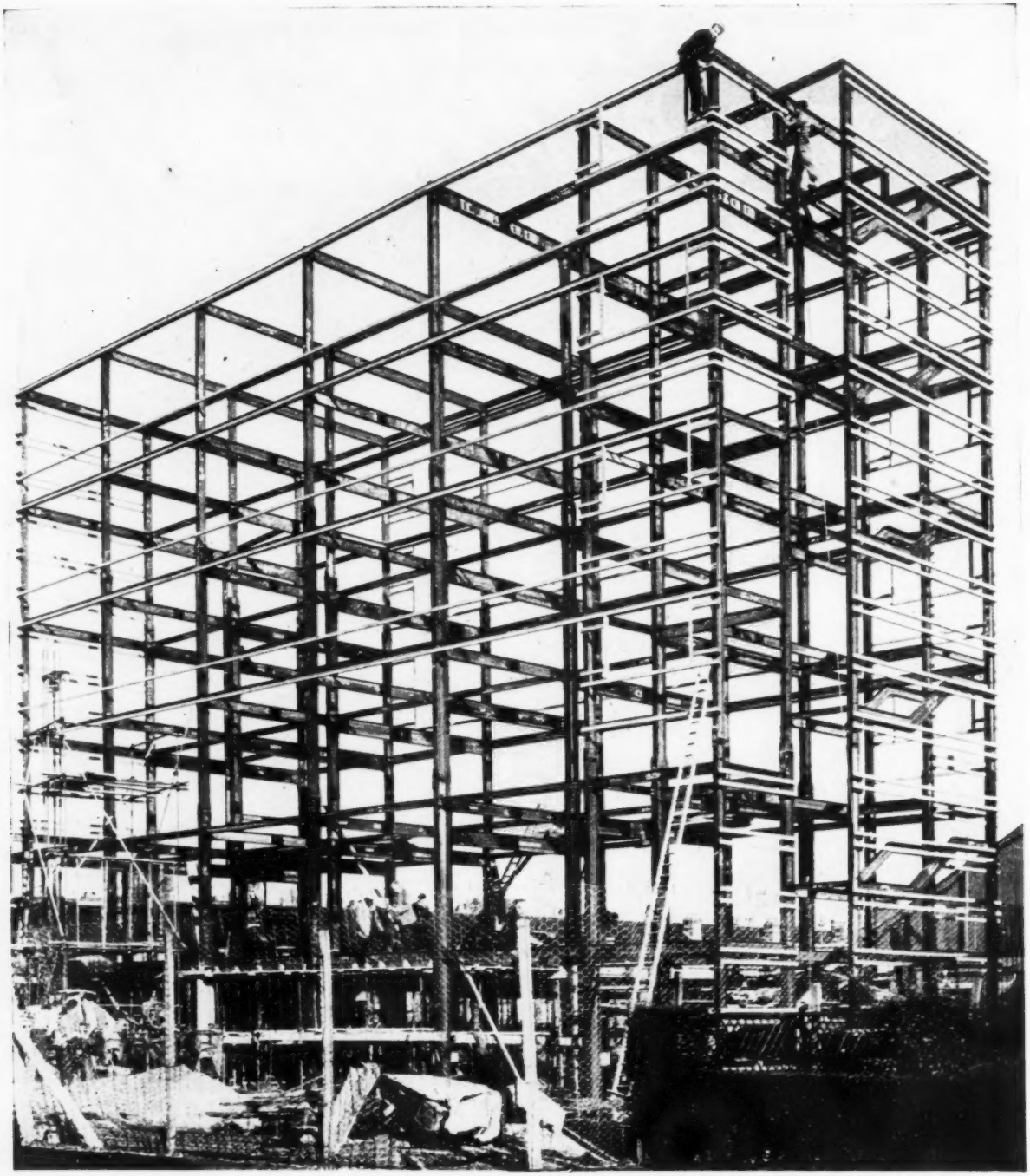
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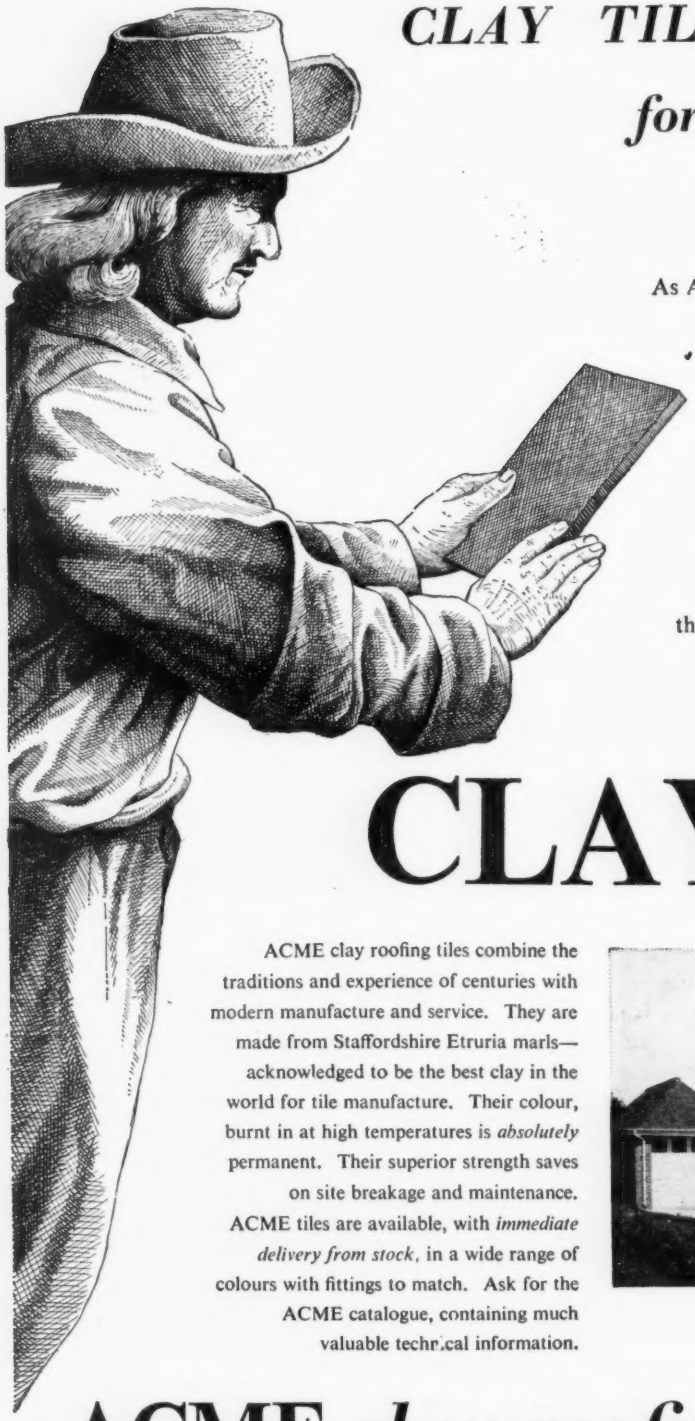
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GP.1



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for eight centuries England's roof . . .

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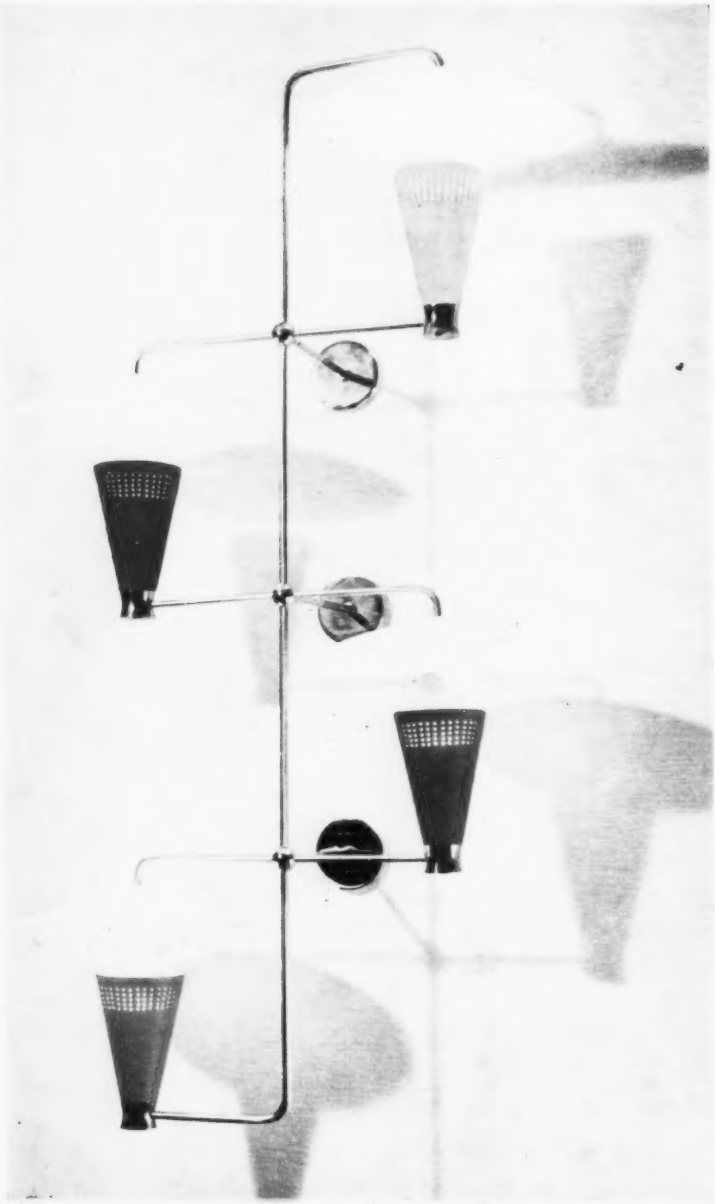
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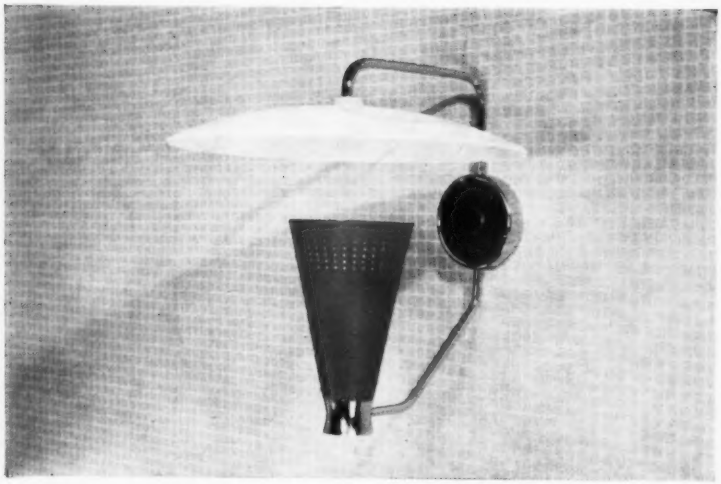
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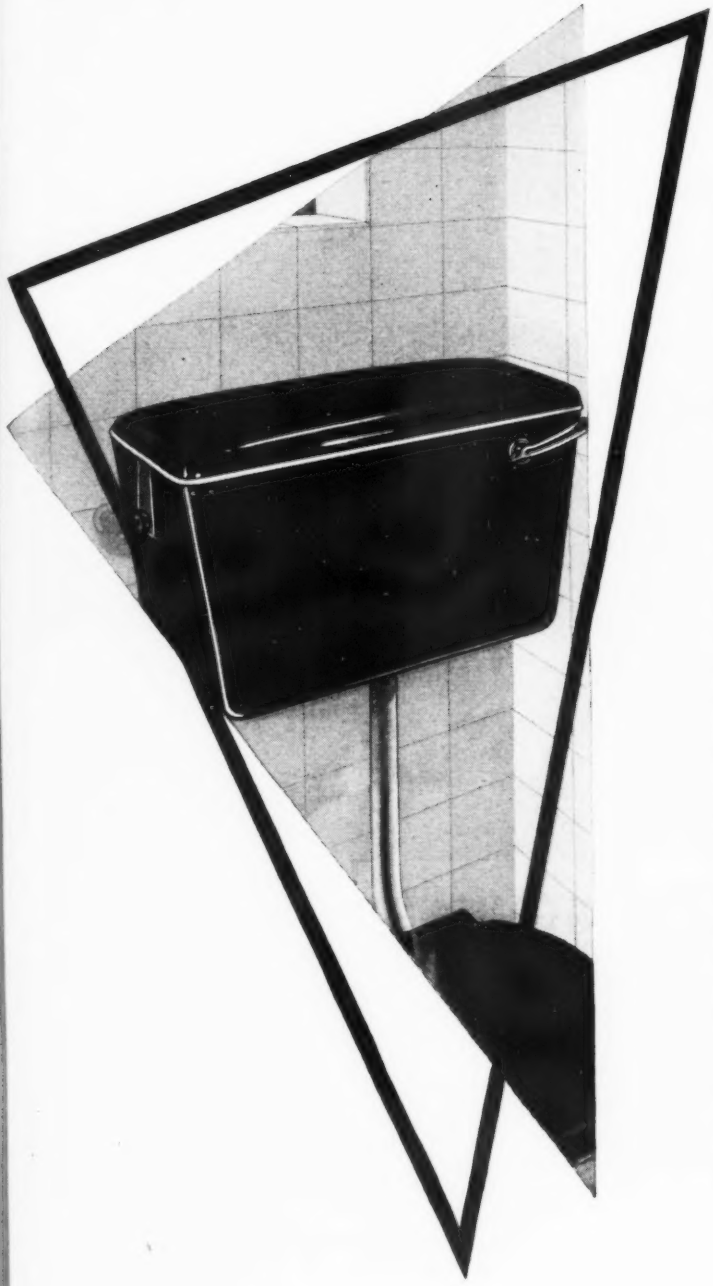
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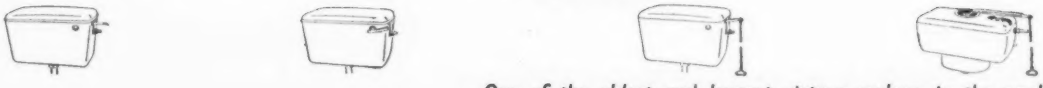
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M-Wb



use RAINHAM TIMBER ENGINEERING TRUSSES

The above photograph shows part of The Phoenix Timber Co. Ltd.'s sheds covering about 2 acres, at Rainham.

Illustrated folder and costs on request.

Messrs. W. W. Howard Bros. & Co. Ltd. (Consulting Engineers: Messrs. T. F. Burns & Partners, Contractors : Messrs. A. E. Symes Ltd.,) used R.T.E. glued laminated timber trusses (60ft. span) in the construction of their new shed at Canning Town.

R.T.E. glued laminated timber trusses have also been incorporated in sheds erected by Messrs. T. & J. Crossman of Torquay (65ft. span). (Rainham Timber Engineering Co. Ltd. both supplied and erected the trusses.)

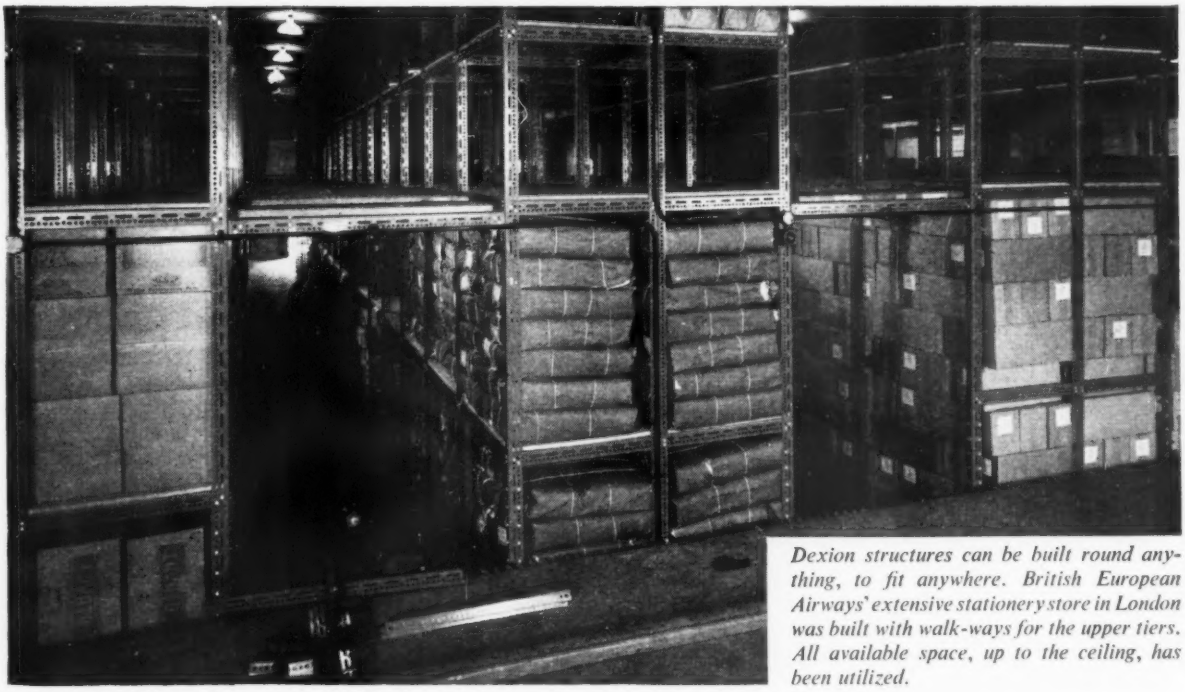
Messrs. Eustace & Co. of Cork have specified R.T.E. glued laminated timber trusses for their sheds about to be erected in their yards at Cork. (60ft. span.)

R.T.E. glued laminated timber trusses are better because they are lighter and more economical.
No painting is required—they remain unaffected even by severe atmospheric conditions in industrial and coastal areas.

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TIB. 1A



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IT PAYS TO THINK OF DEXION
–at the planning stage

A FACTORY LAYOUT must be flexible, capable of being adapted at short notice to changing circumstances. This applies particularly to storage requirements and works equipment.

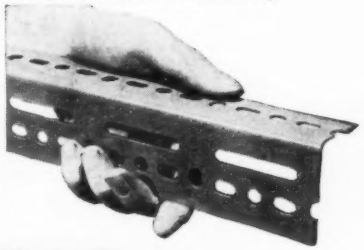
There is no more versatile material for building stores and equipment, exactly to your own designs, than Dexion Slotted Angle. Such Dexion equipment is quick and cheap to install. And any Dexion structure can be readily adapted and altered to meet changing needs. There is no waste, no scrap: Dexion is fully recoverable, and can be used again and again.

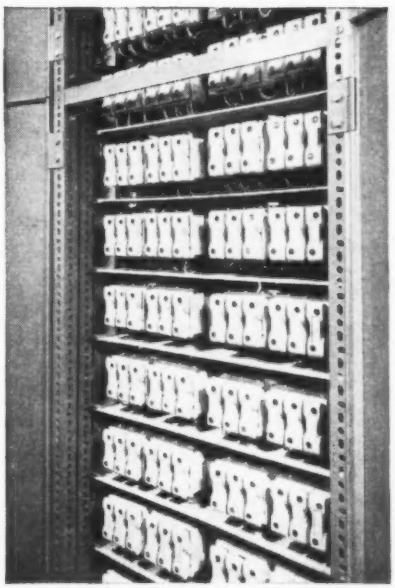
When you are planning the building and layout of a factory, Dexion deserves careful consideration at an early stage. This versatile material may bring about important economies, initially and for years to come.

A technical design and estimating service is available free; and for large installations, construction teams will carry out the work if required.

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Dexion 225 is sold in packets of ten 10-ft. lengths, complete with bolts. Steel Dexion (price from 1/3½ to 1/5 per foot) is rust-protected, stove-enamelled. Where a light but strong, non-magnetic, non-corroding material is required, use Alloy Dexion (full technical details and prices on request). Send today for sample piece of Dexion and illustrated booklet BH.143 showing many uses in industry. Dexion Ltd., 65 Maygrove Road, London, N.W.6. (Telephone MAIda Vale 6031-9.)

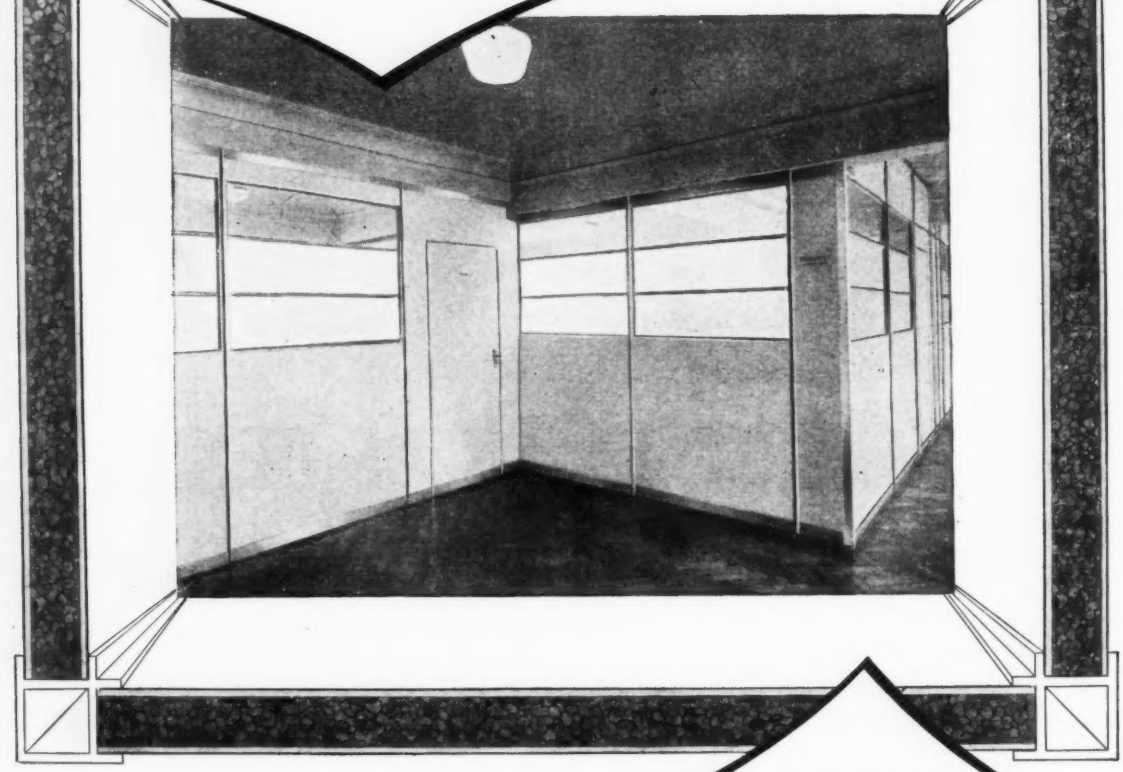




Dexion provides a strong but inexpensive mounting for fuses. In this panel, dividers have been fixed between Dexion cleats. Dexion is suitable as a framework for every type of fuse or switchgear, light or heavy, large or small.

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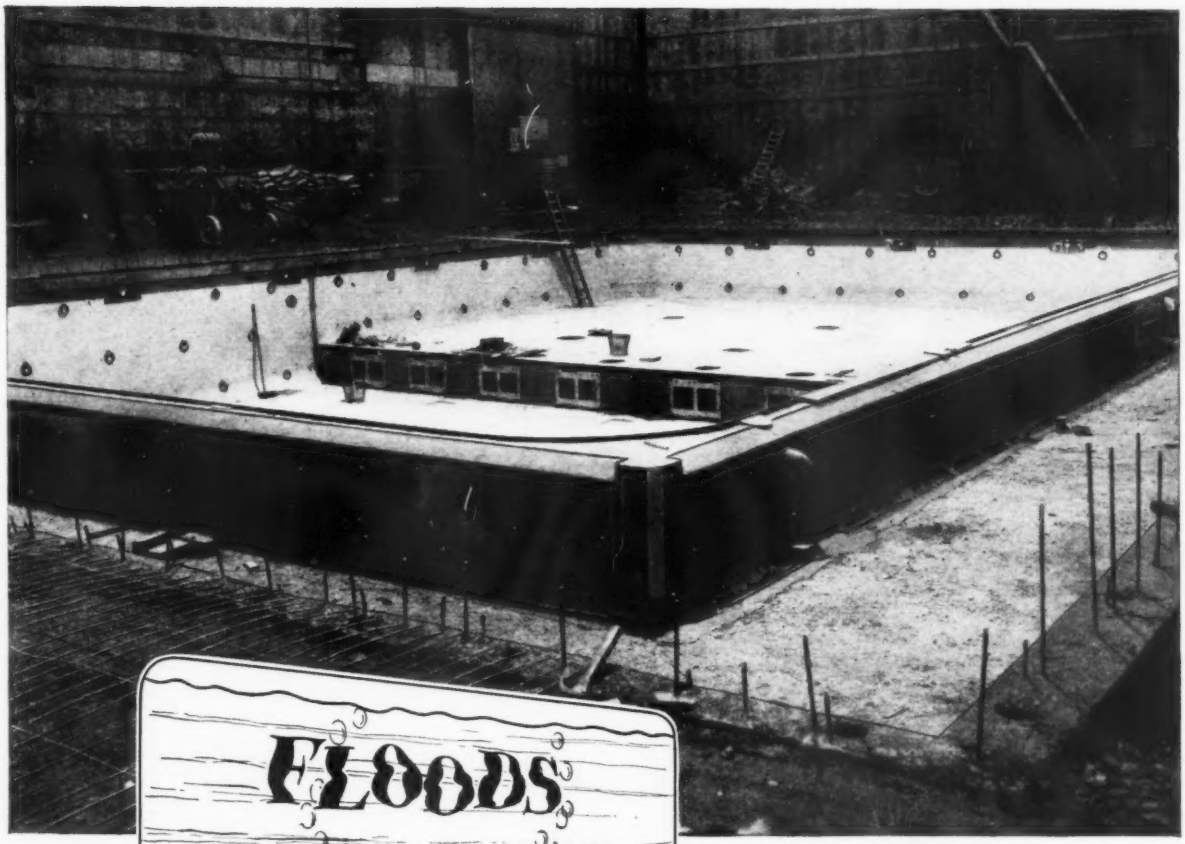
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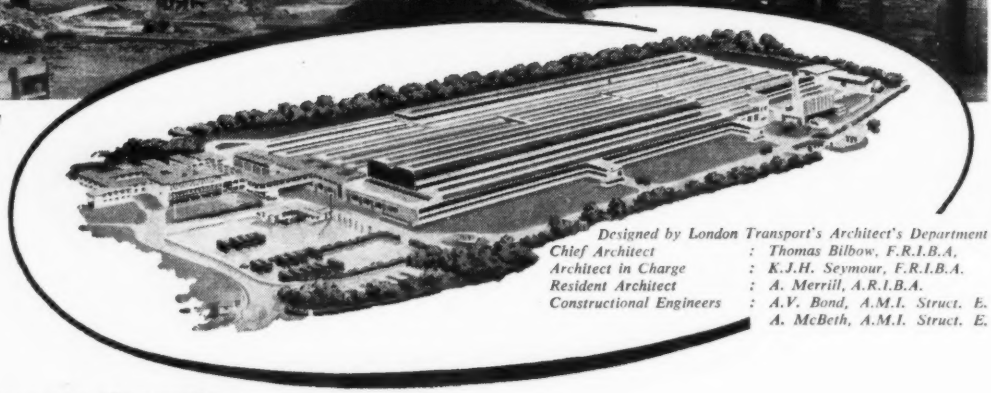
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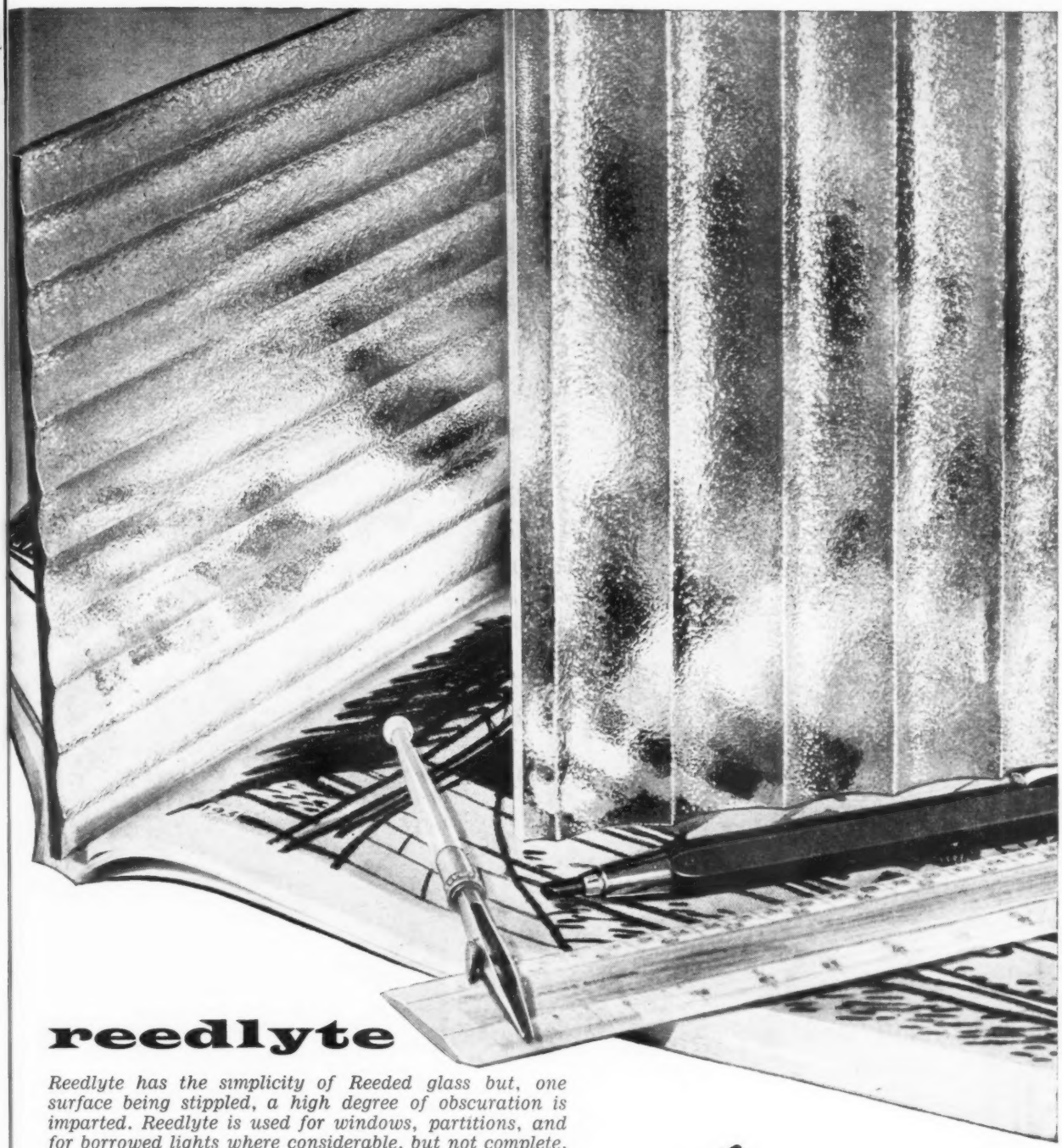
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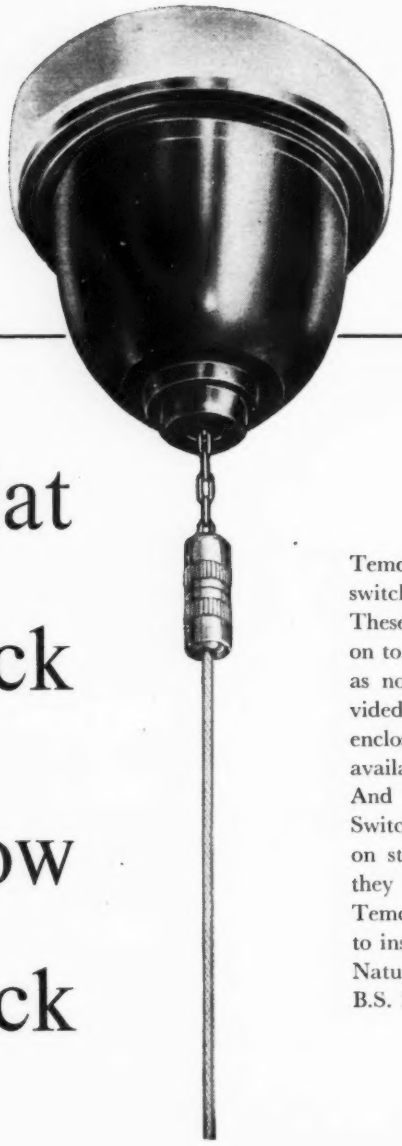
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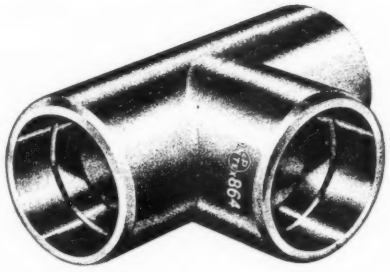
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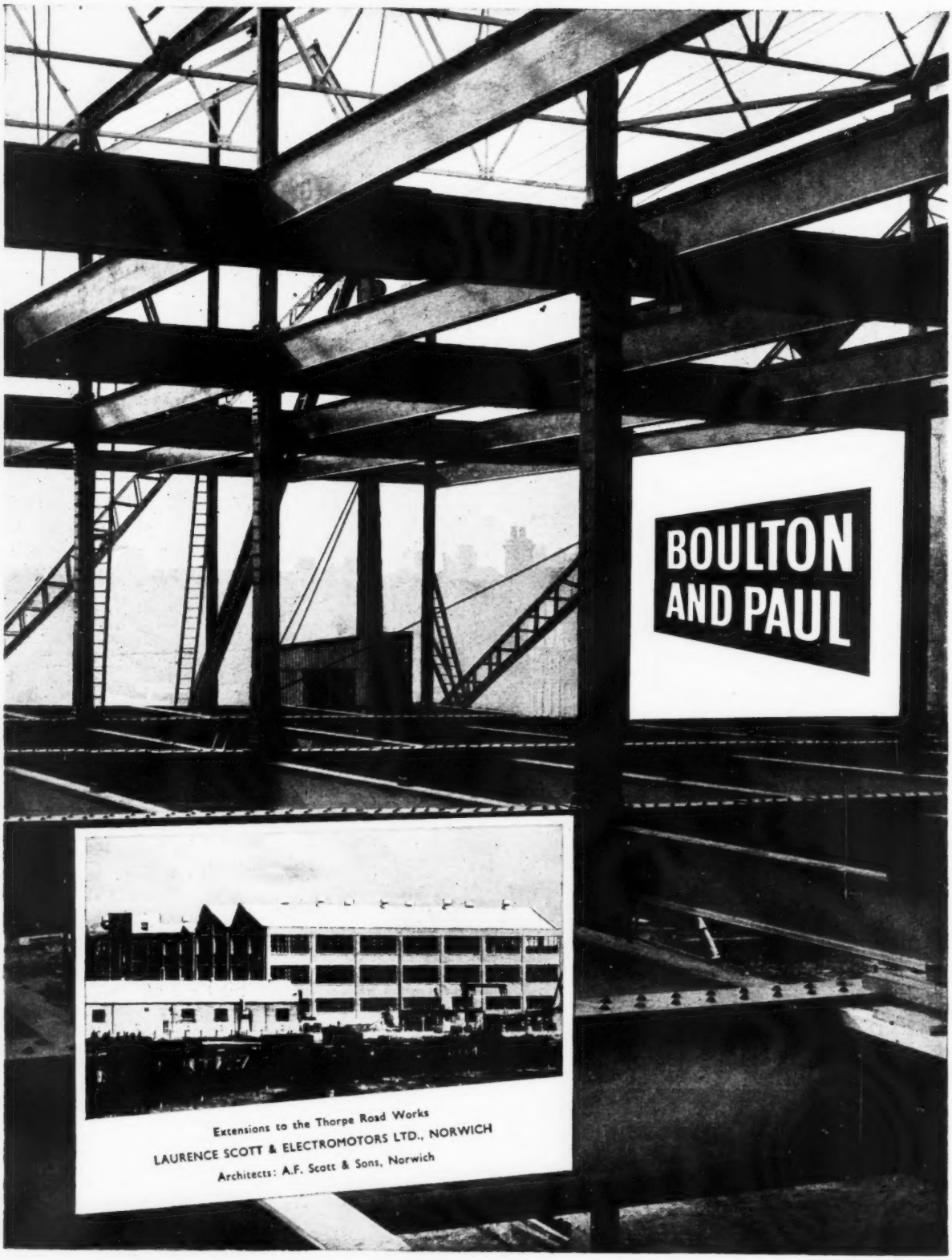
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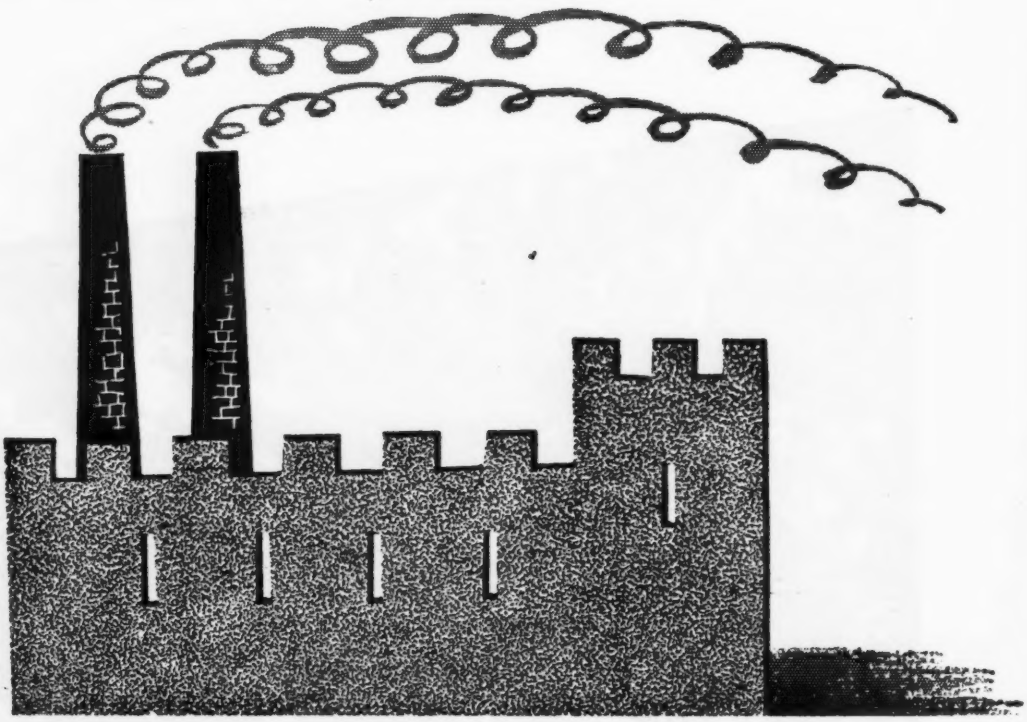
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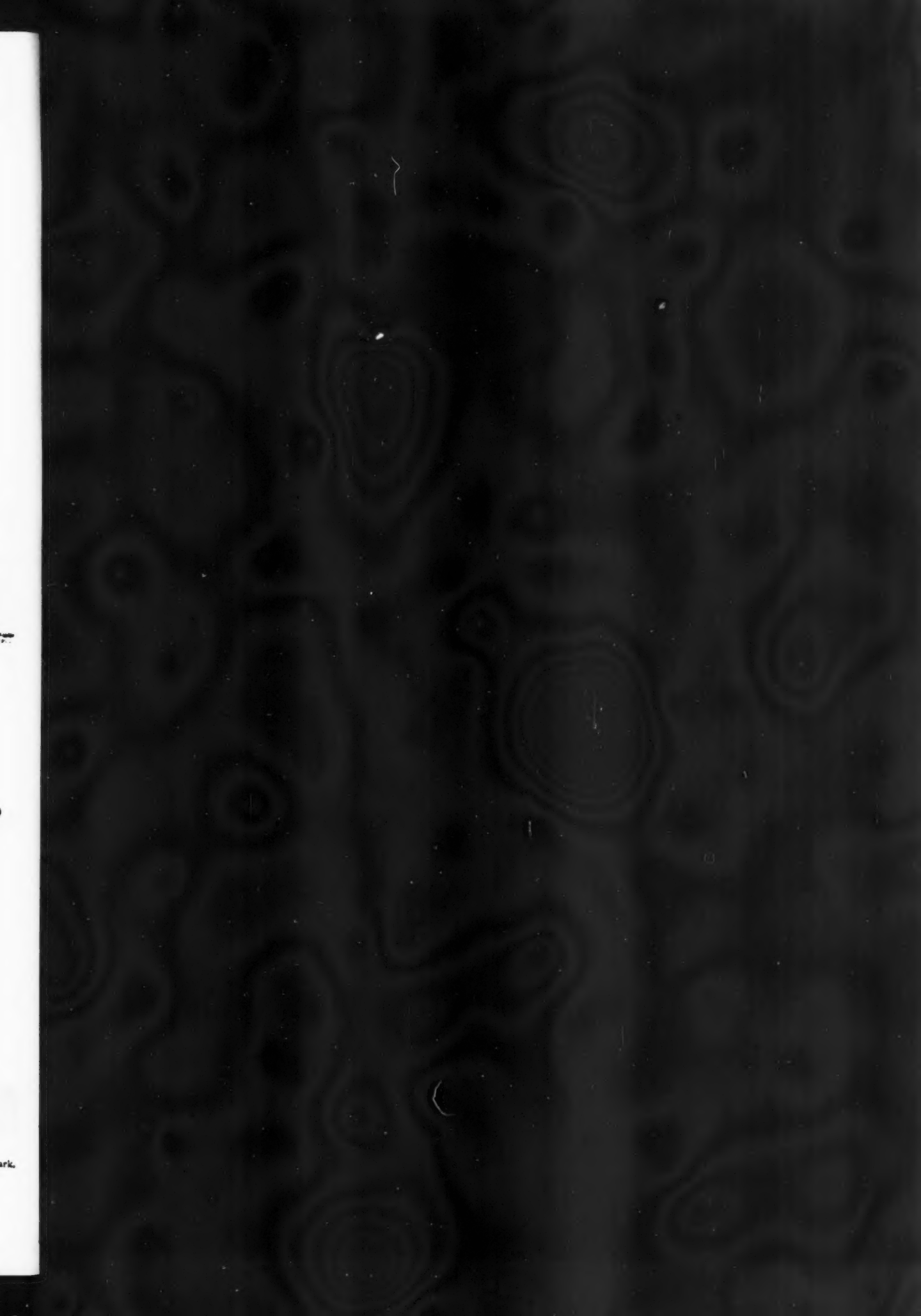
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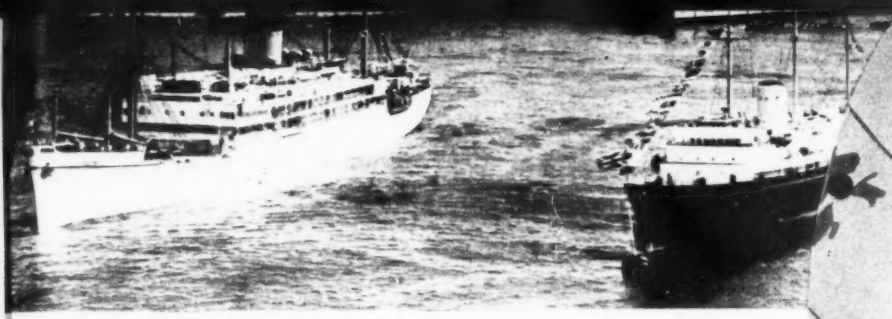
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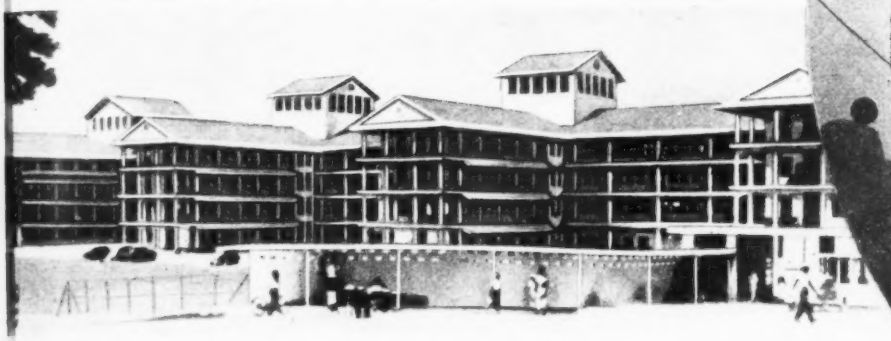
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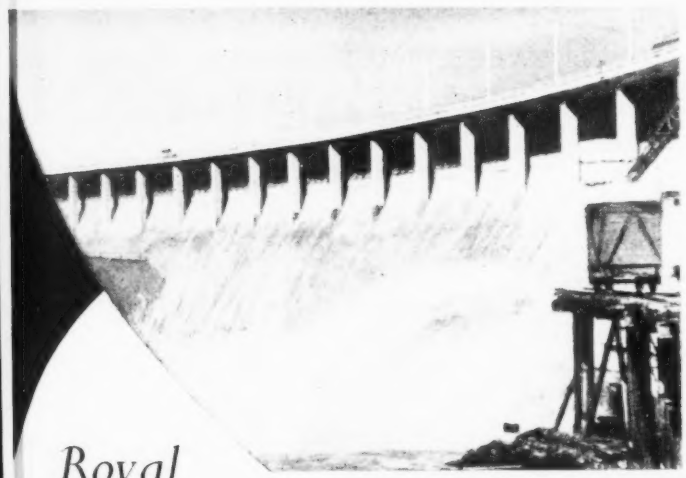
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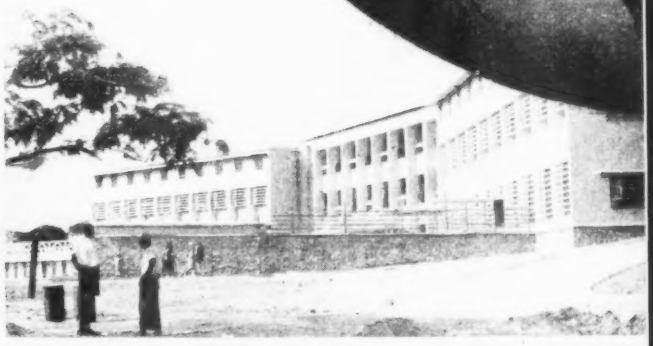












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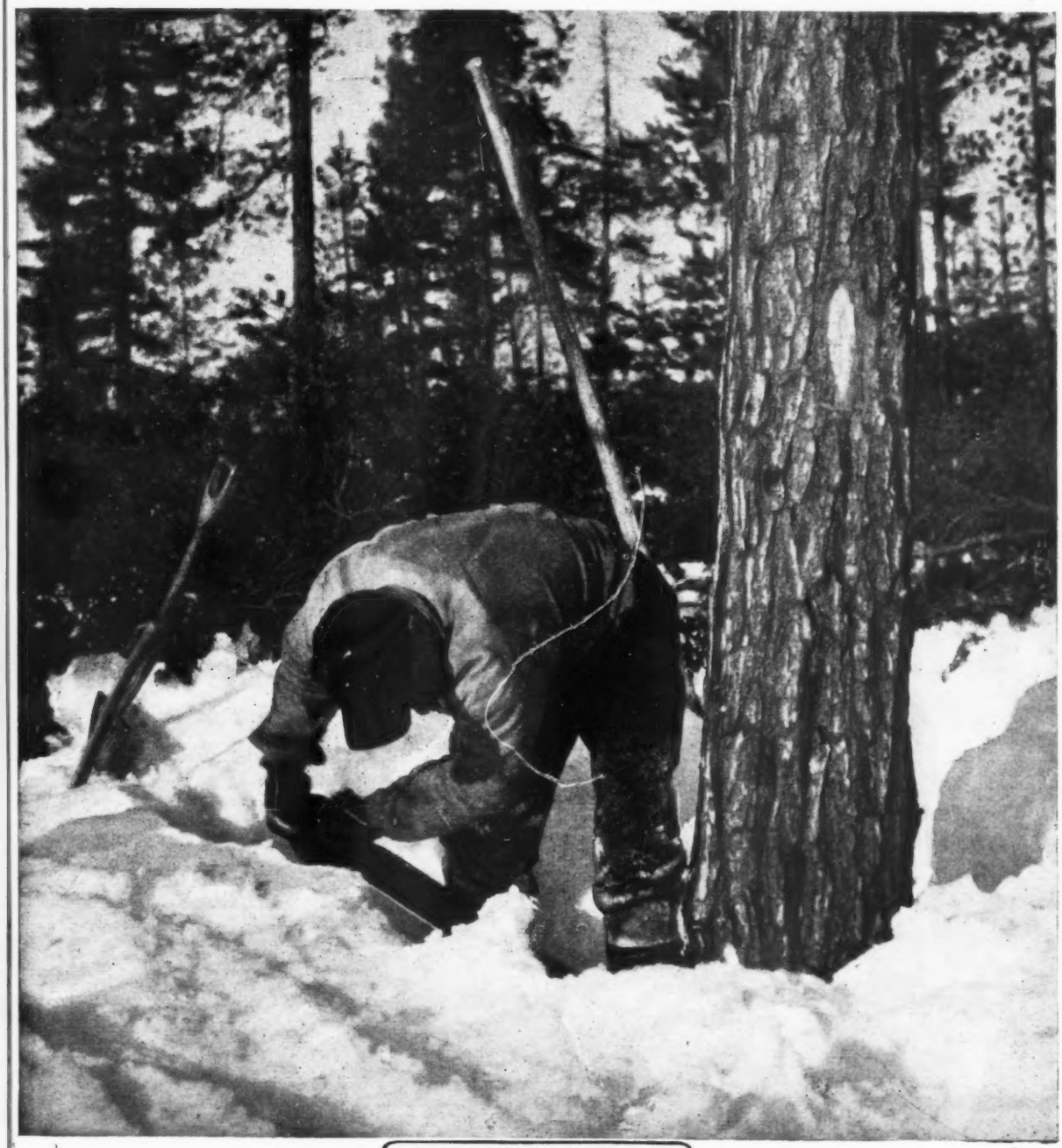
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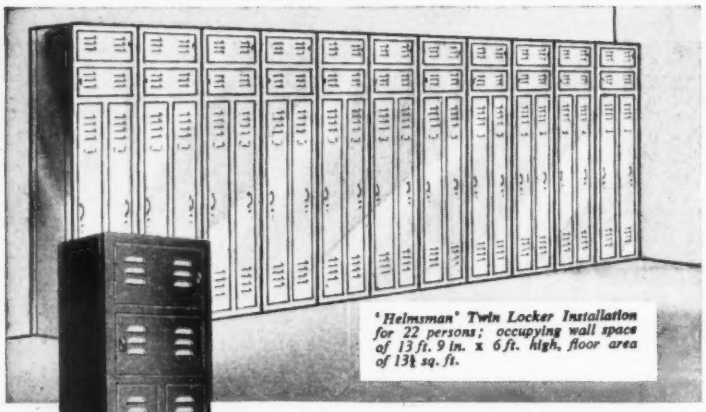
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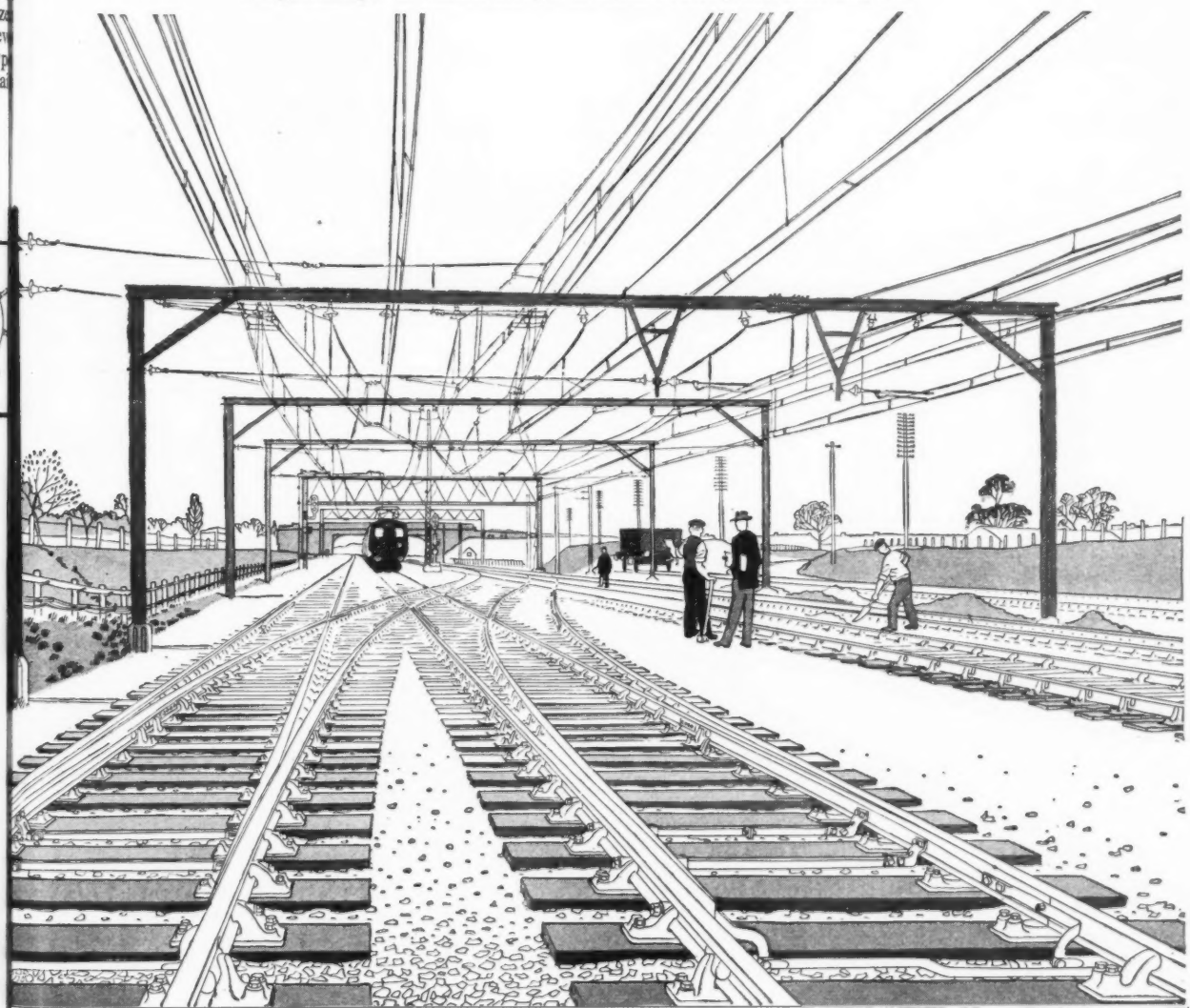
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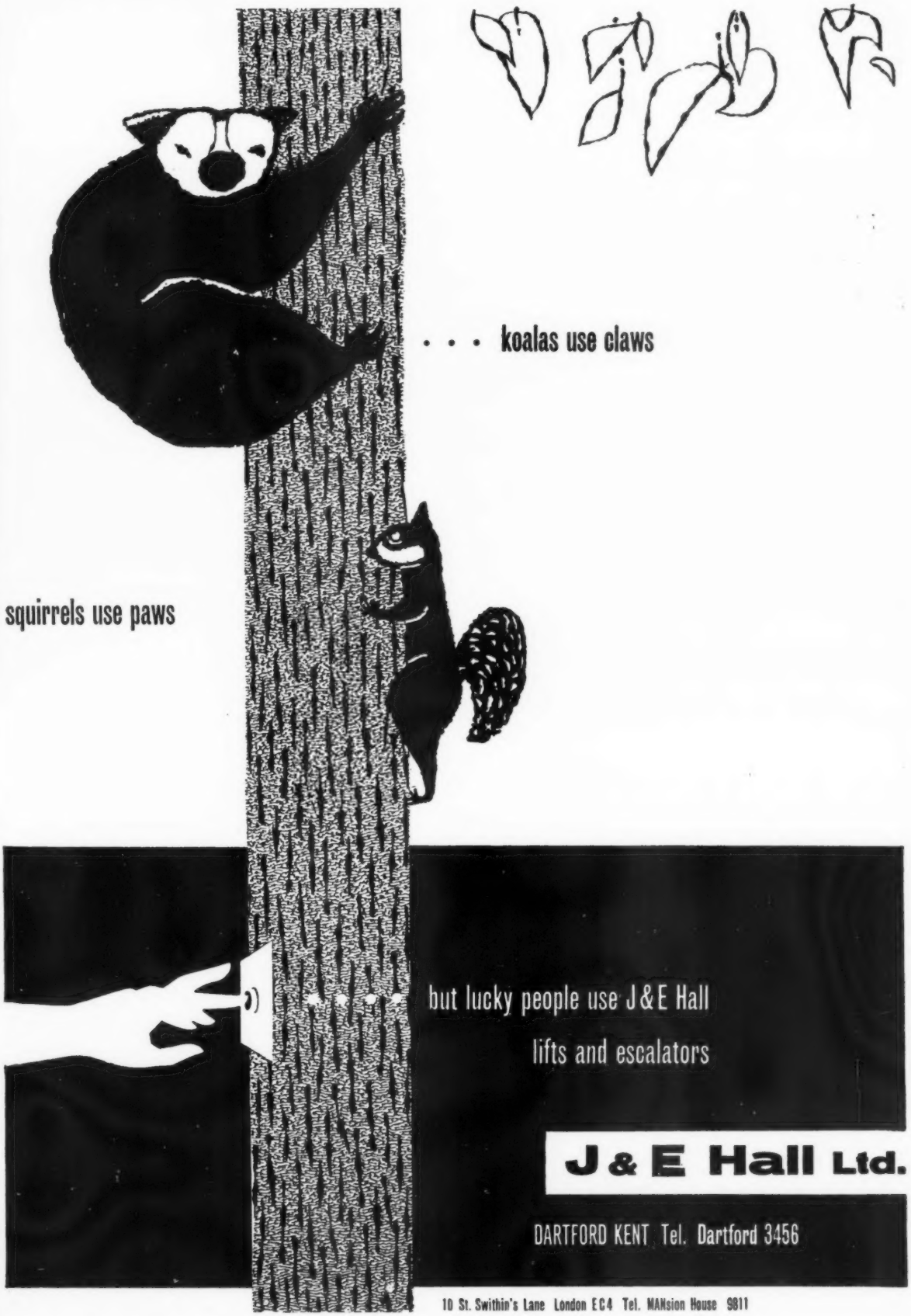
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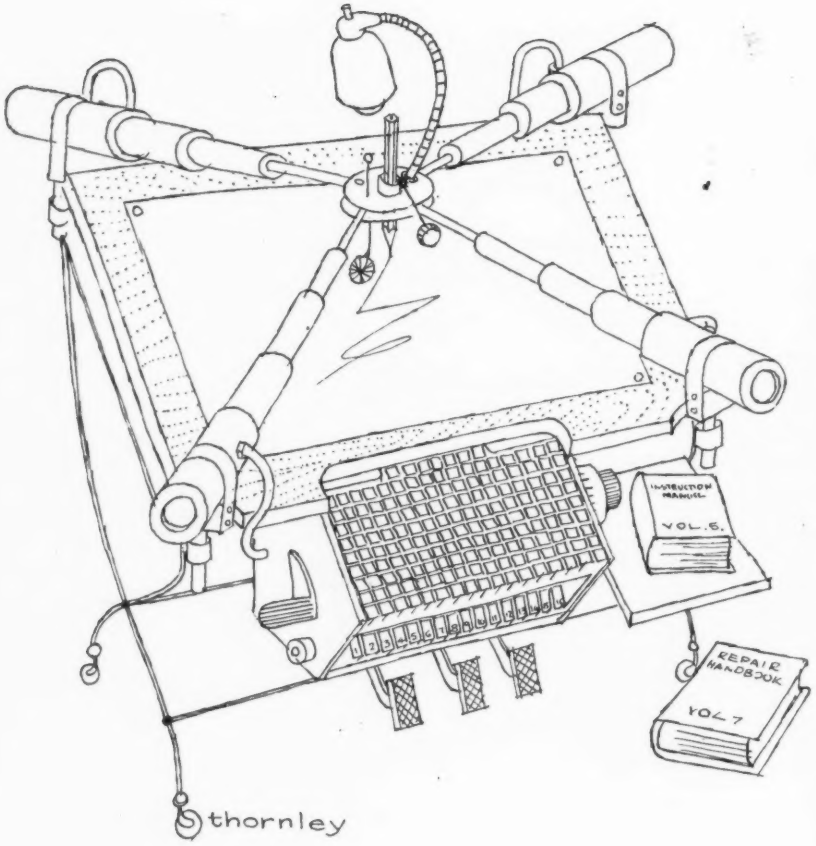
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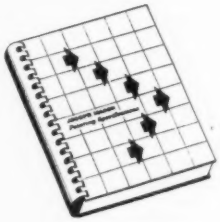
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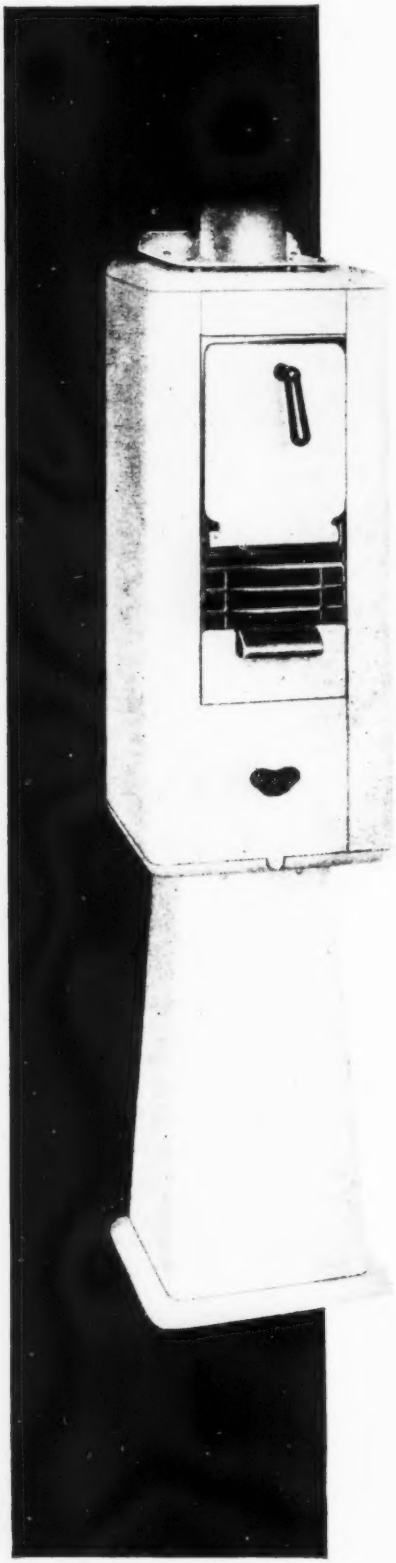
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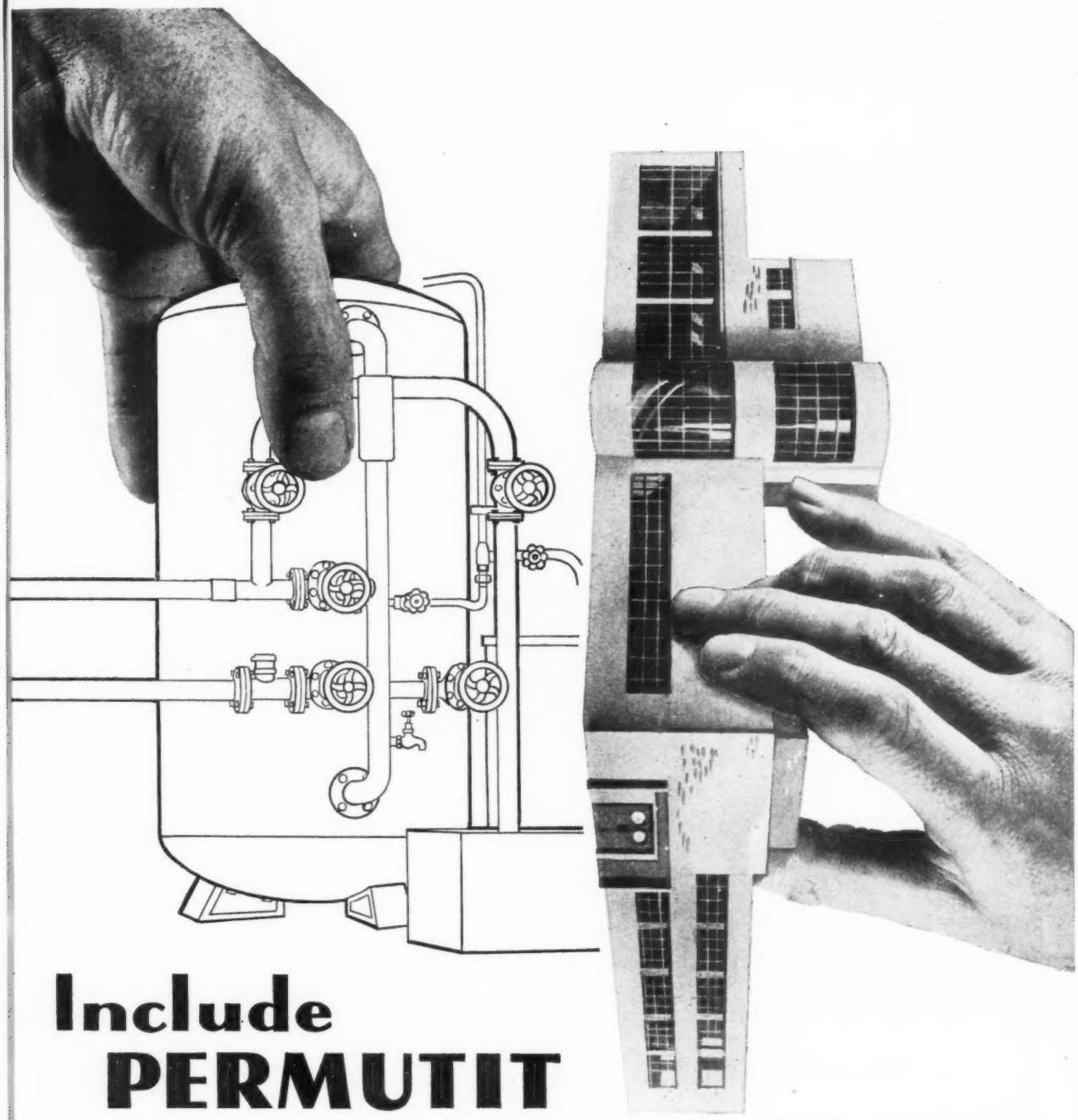
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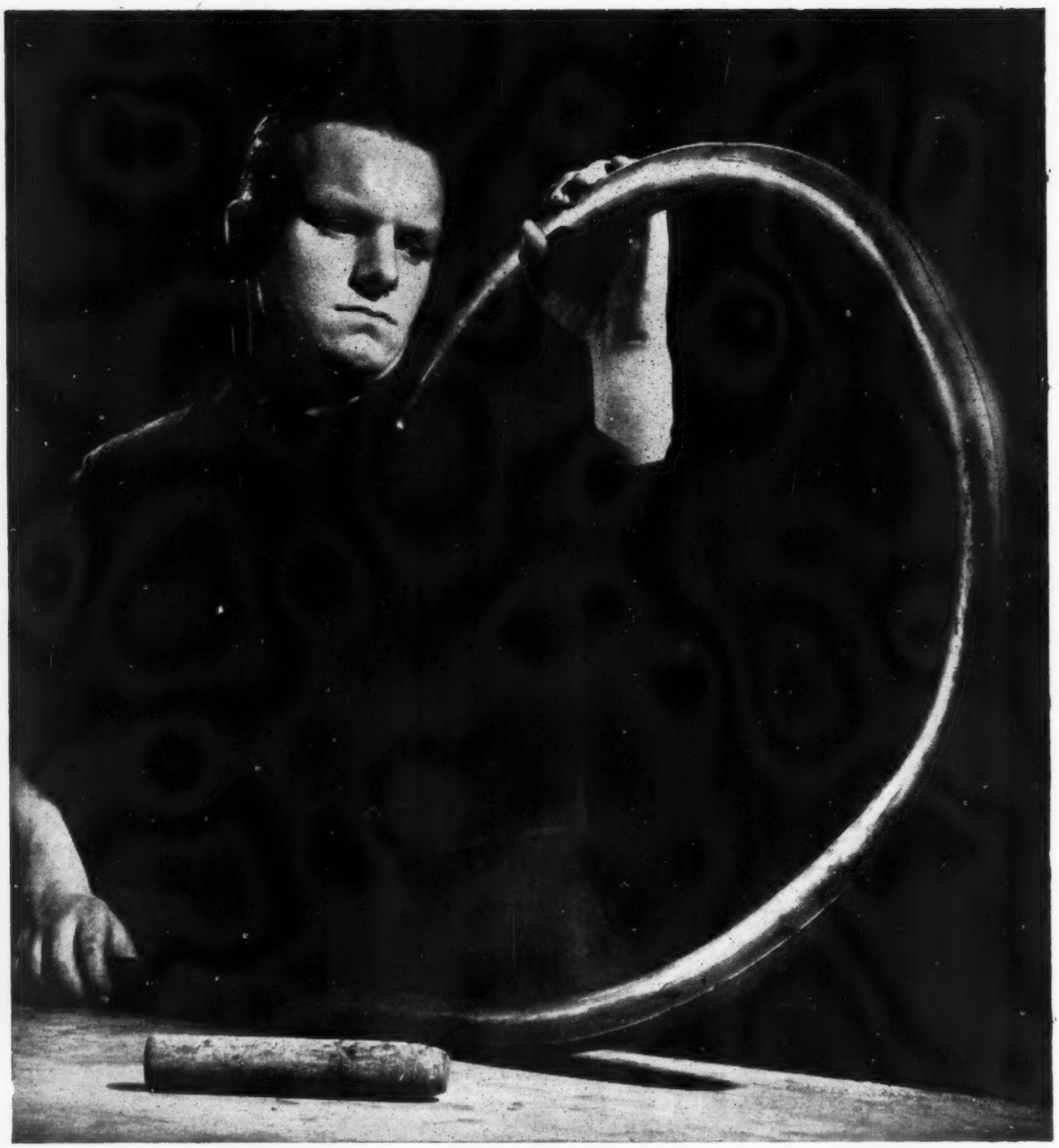
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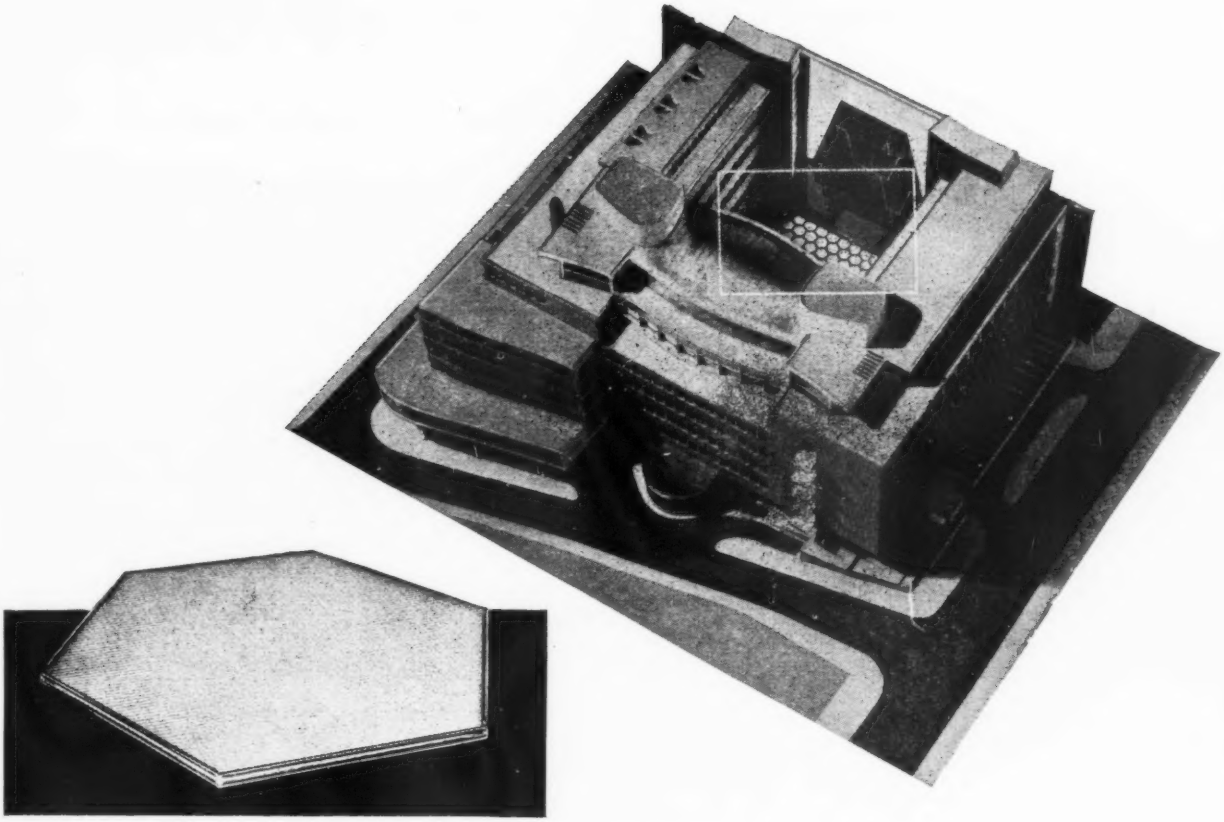
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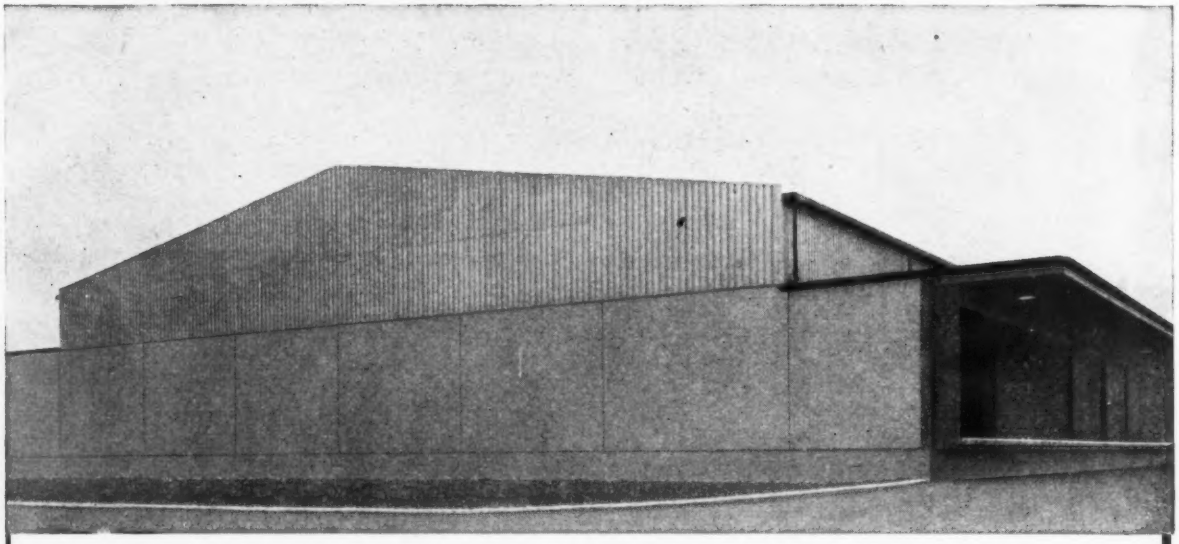
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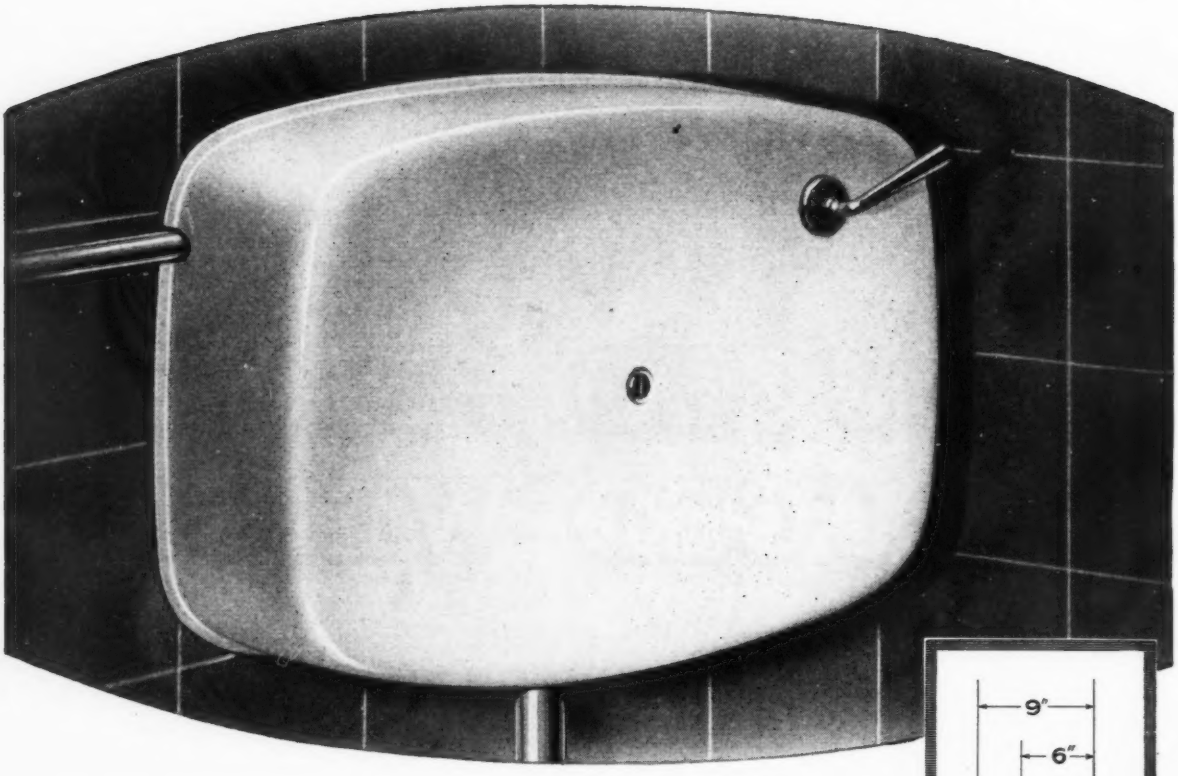
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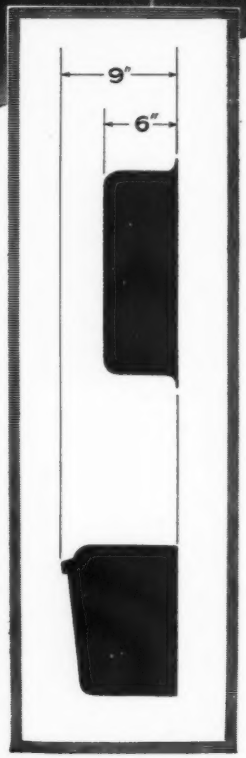
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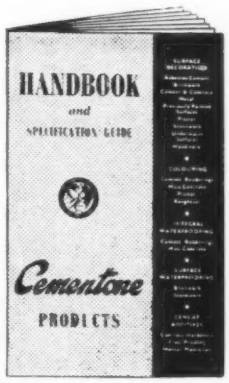


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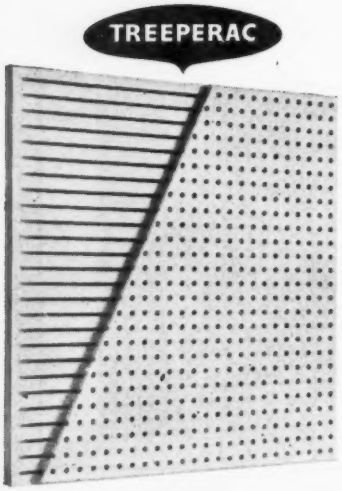
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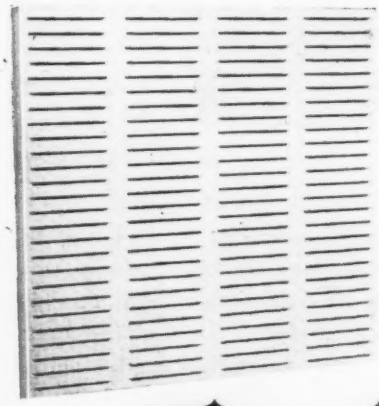
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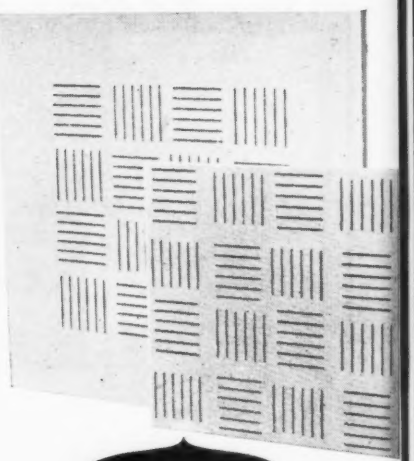
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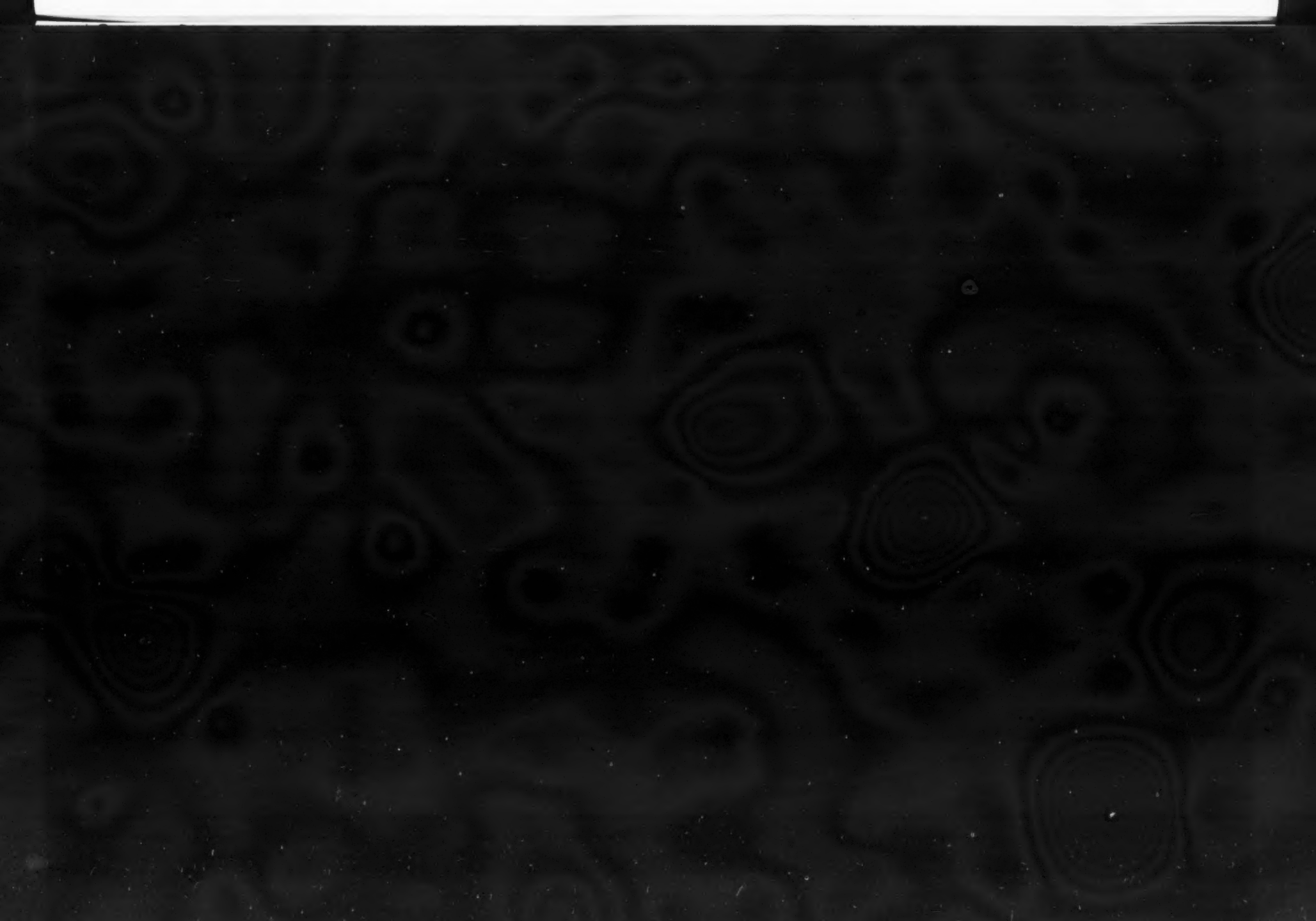


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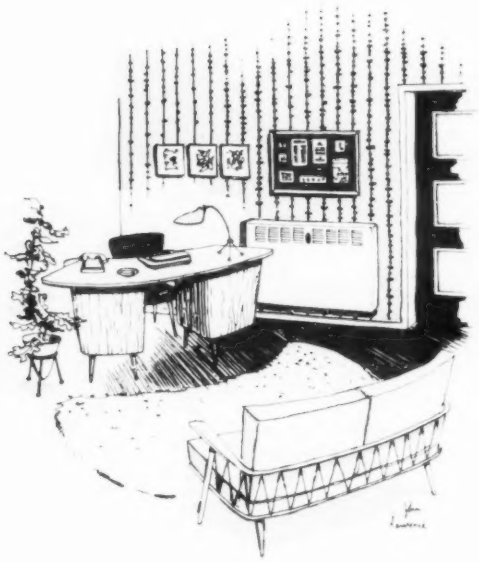
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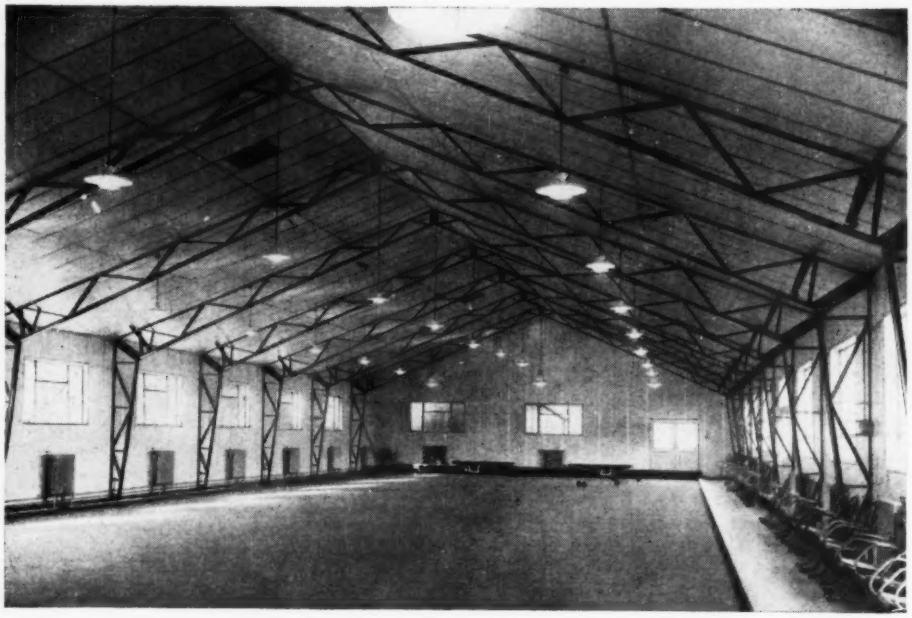


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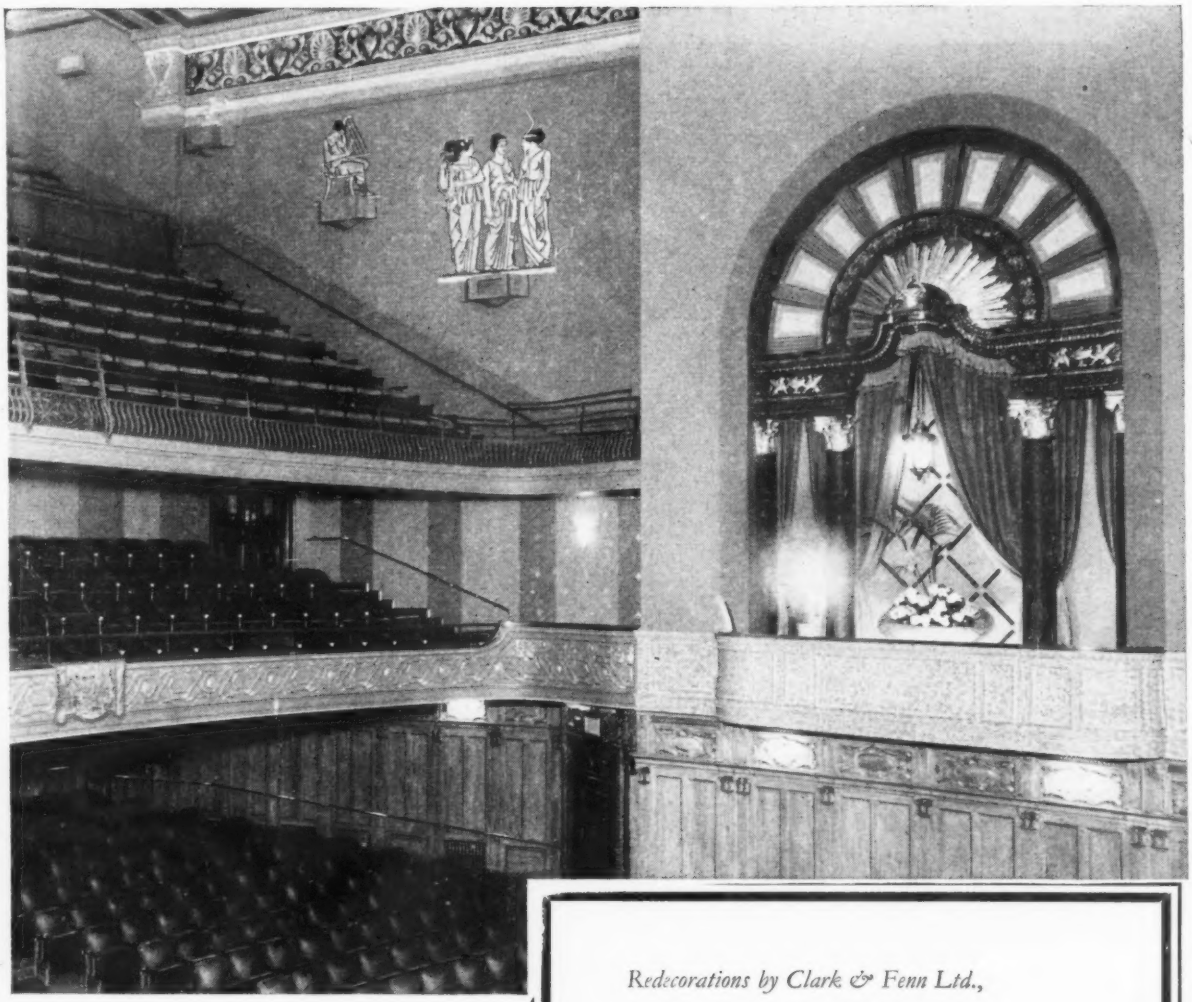
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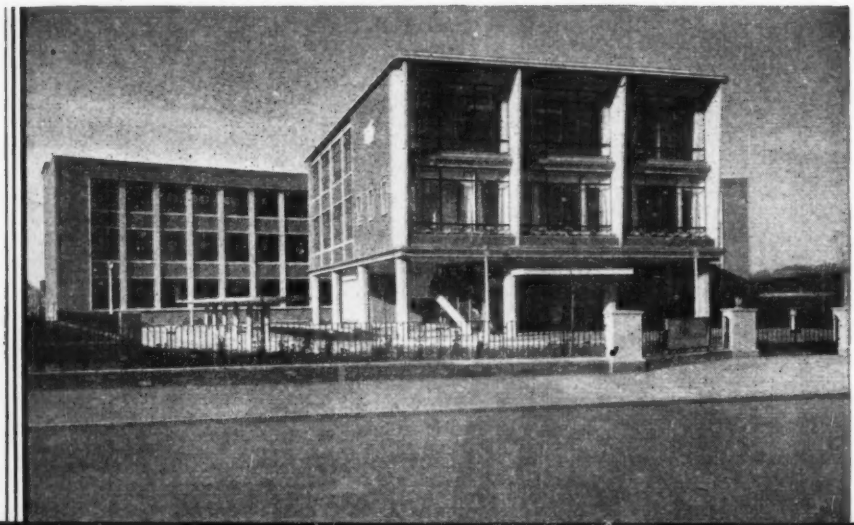
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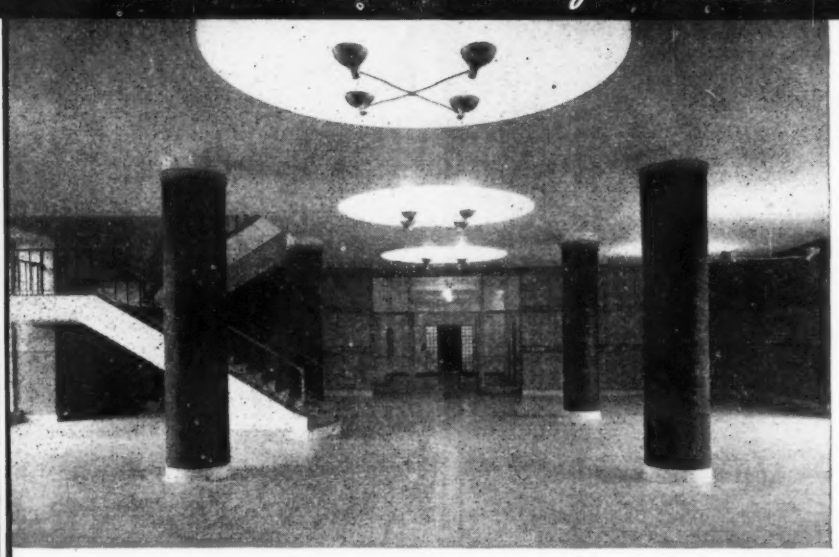
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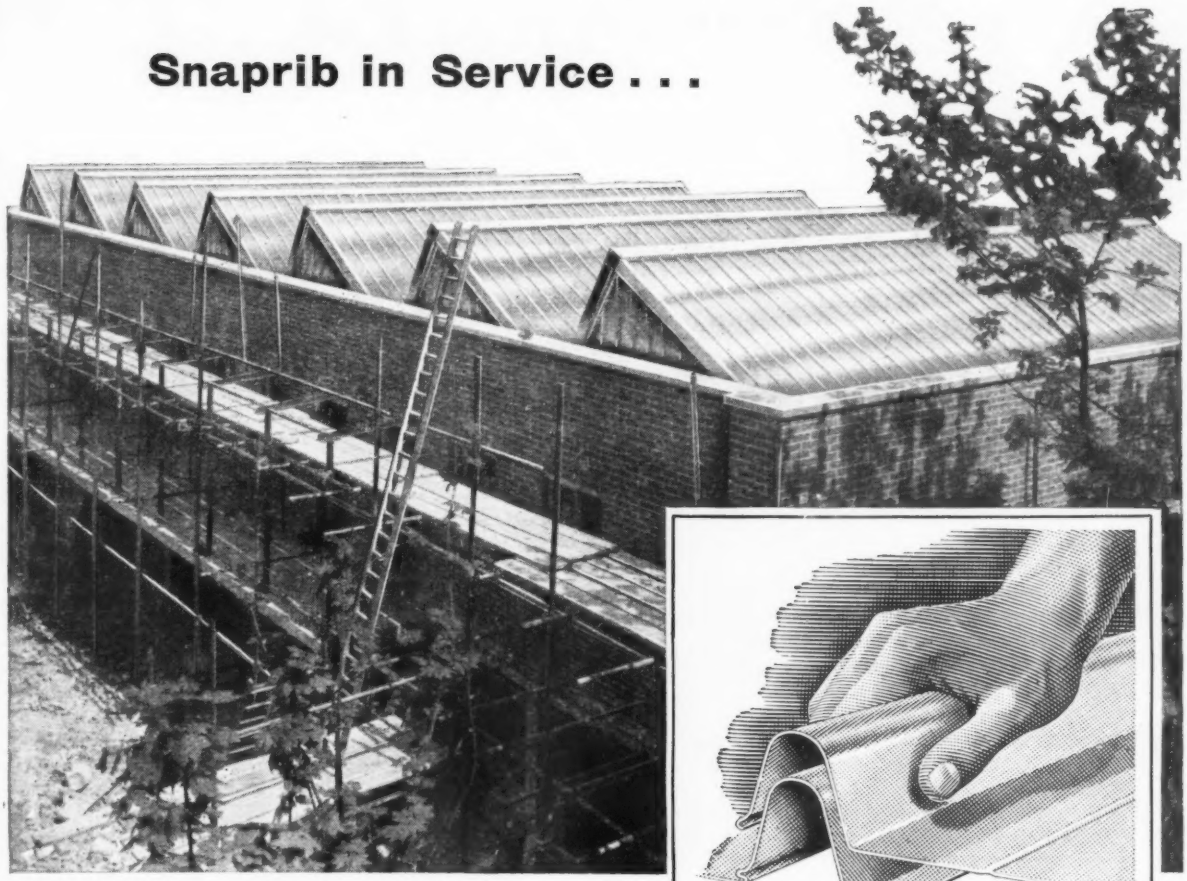
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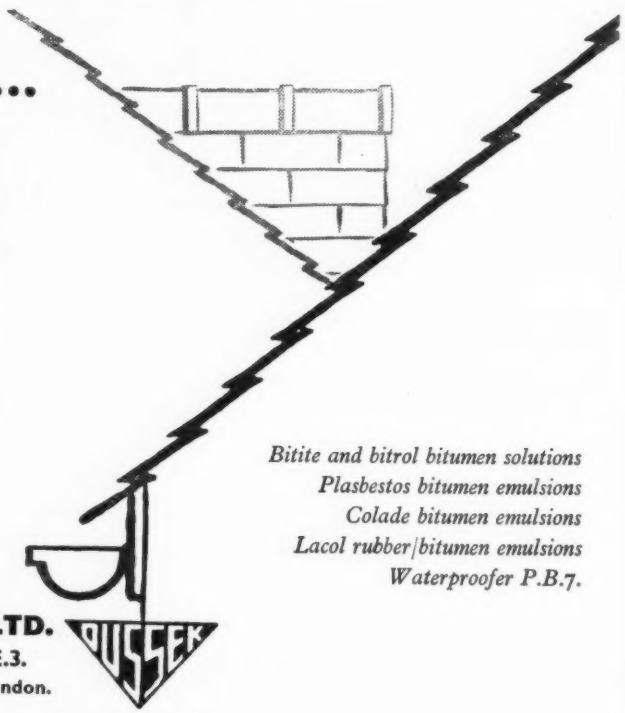
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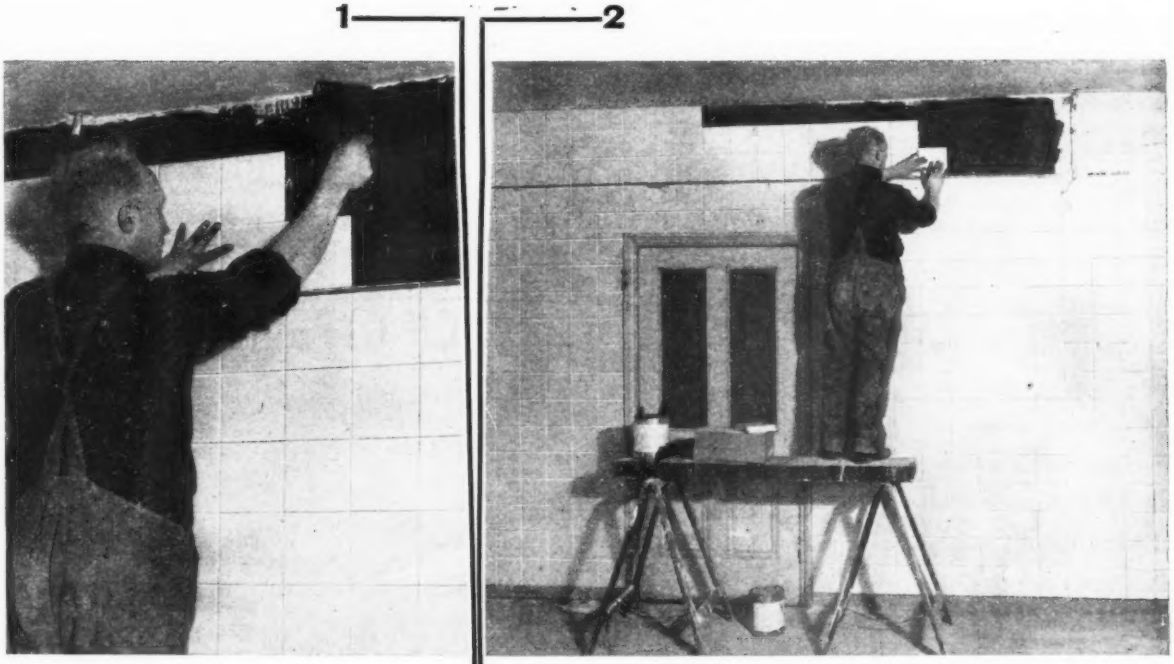
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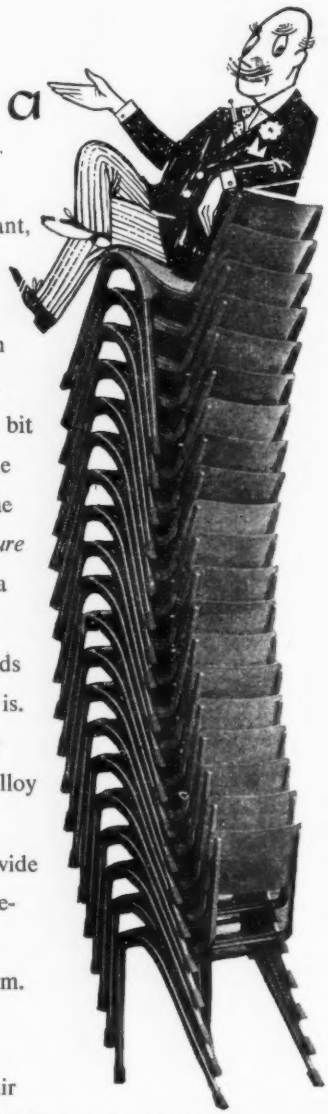
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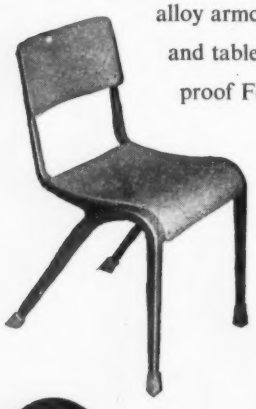
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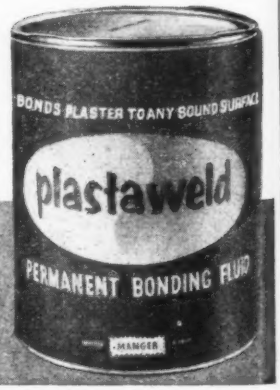
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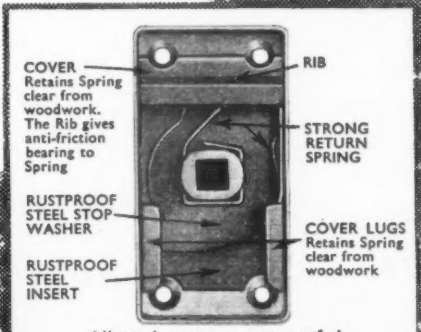
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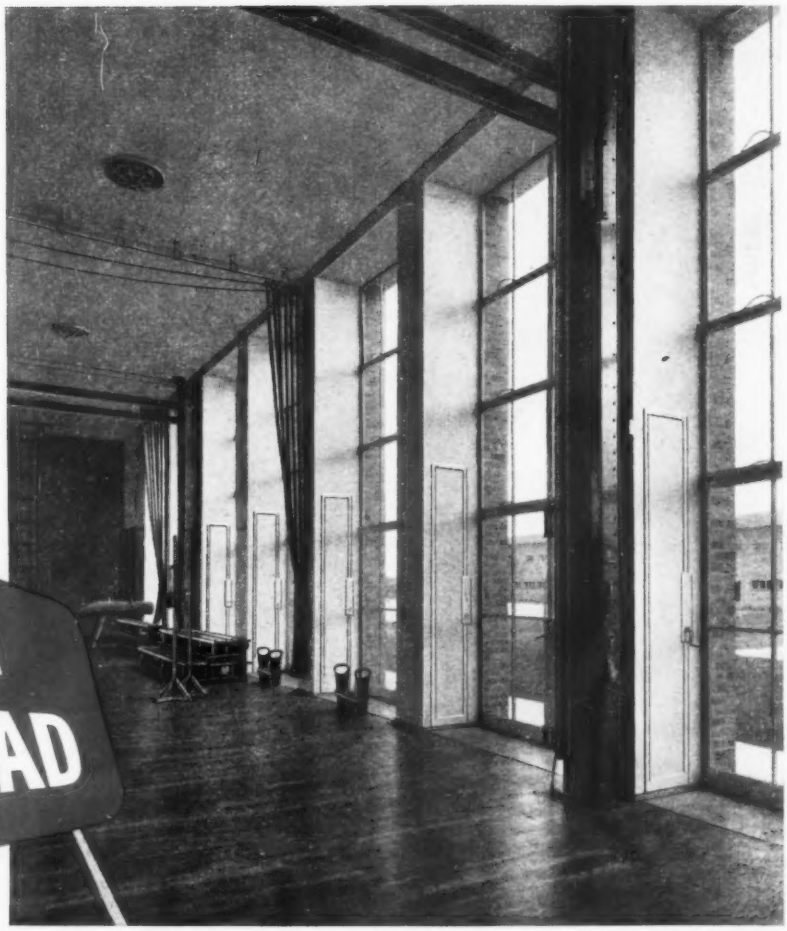
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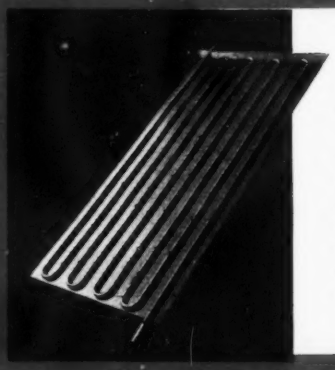
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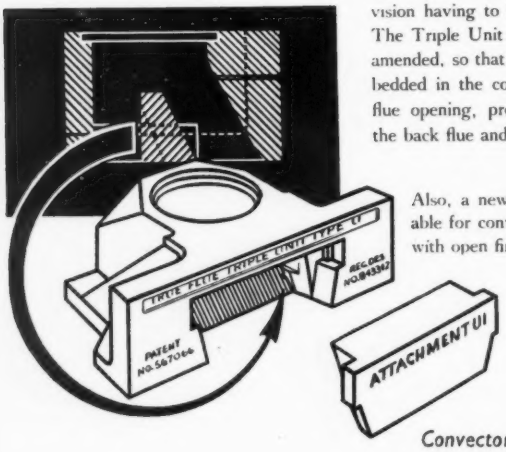
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THE MATERIAL	A ceiling of ½ inch thick ASBESTOLUX precision-cut ceiling panels

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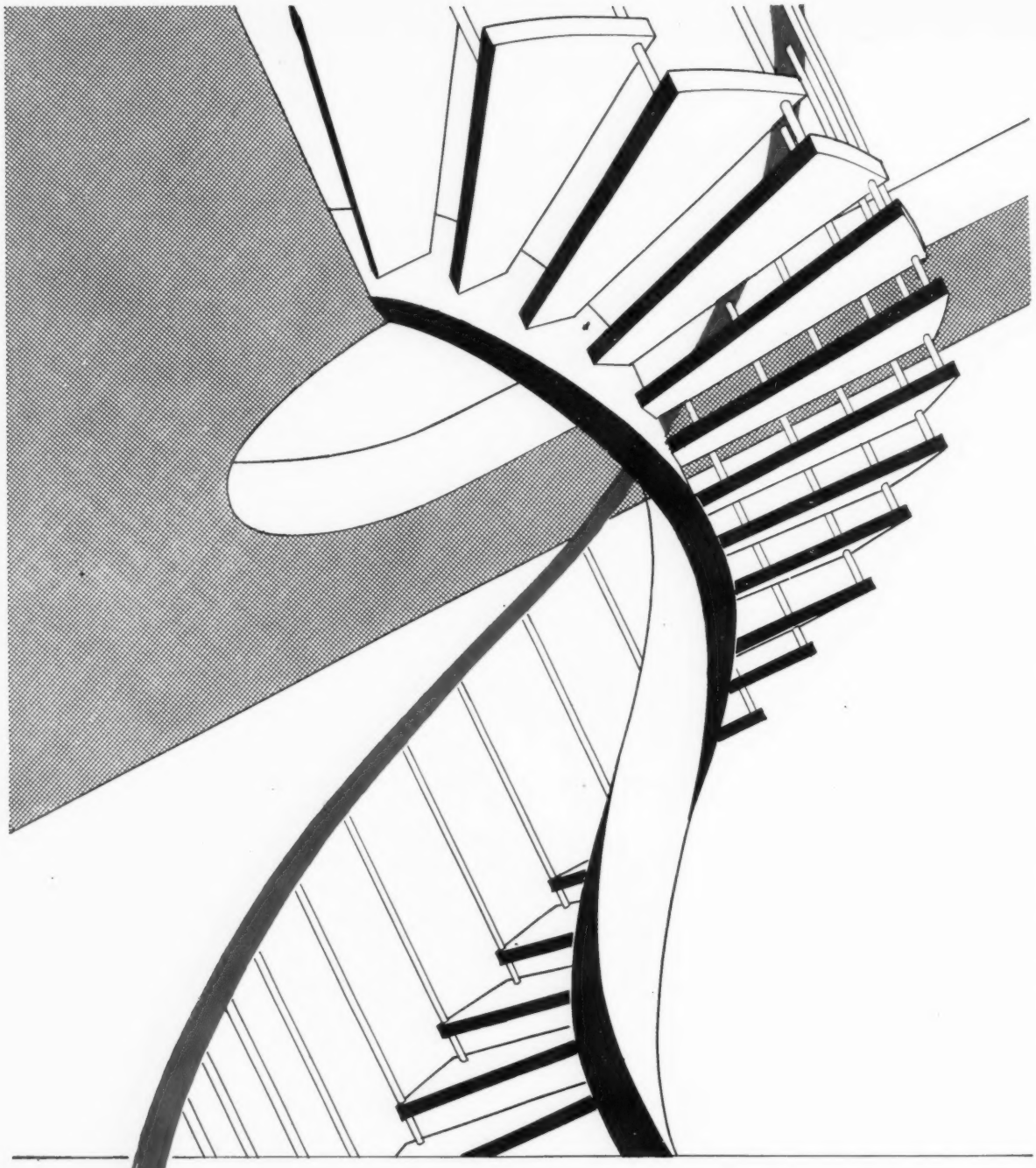
Full details of this test are contained in the official report Reference F.R.O. S.1. 653.

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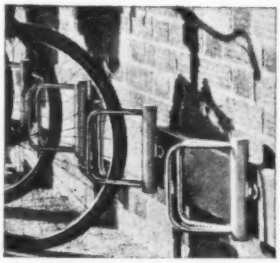
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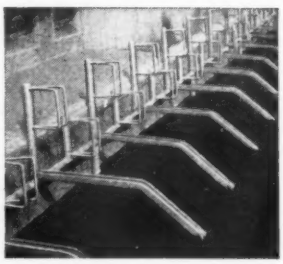
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THE ARCHITECTS' JOURNAL

No. 3206 Vol. 124 August 9, 1956

9-13 Queen Anne's Gate, London, S.W.1 Tel. WHI 0611

Subscription rates: by post in the U.K. or abroad £2 10s. 0d. per annum. Single copies, 1s.; post free 1s. 3d. Special numbers are included in Subscriptions; single copies, 2s.; post free, 2s. 3d. Back numbers more than 12 months old (when available), double price. Half-yearly volumes can be bound complete with index in cloth cases for 30s.; carriage, 1s. extra.

READ THIS WEEK

Revision of MOE Colour Bulletin page 183

Projects for the International Building Exhibition at Berlin pages 182, 184, 185 & 188

Should offices be re-appraised? page 186

Churches in peril .. page 186

Demolition begins on Imperial College of Science page 187

£1m. college design open to competition page 187

College of Technology at Kumasi page 192

FILE THIS WEEK

The Industry. This week Brian Grant discusses some new electric heating panels, a convection fire fitted with a boiler, a new method of dry rot treatment, a British Standard on pitch fibre pipes, a range of electrical convector heaters and three new types of galvanised steel roof decking .. page 197

Planning Reviews. The beginning of a new series on town and country planning matters. This first feature deals with the latest report from the Bournville Village Trust and an American's assessment of our New Towns page 199

Building of the Week. This is a secondary school in Sweden, designed by the winner of a national competition page 205



Thirty Years On



In 1927, at Weissenhof, outside Stuttgart, Germany staged the first international housing exhibition, with Mies van der Rohe in charge, and nearly every famous name among modern architects contributing. One of the outcomes of this international rally was that a number of independent national efforts to reform and rejuvenate architecture found that they had so much in common (left) that they became the International Style. Now, thirty years later, a second great Bau-austellung is to be held, in Berlin in 1957, and once more the masters of the Modern Movement will be building together on one site.* Again there will be much in common; the acceptance of two standard building envelopes, the point-block and the slab, for instance. But the masters and their followers have had such varied experiences within the last thirty years that diversities will be more than manifest. Behind the point-block by Rehm and Siegmann in the foreground, are blocks by Gropius (curved) and behind a typically French one by Pierre Vago; and behind that again a characteristically complex outline by Alvar Aalto, while across to the right, behind Aalto's, is a vee-legged slab that is unmistakably Niemeyer. It is not just personal styles that give this variety: Berlin is gathering together the fruits of dwelling-design experience from climates as diverse as those of Sayanatsalo and Sao Paulo; the International Style has become International in a profounder and more vital sense. (See also page 188.)

*except Le Corbusier, whose Unité will be on another site: see page 184.

NEWS IN BRIEF

"Search for a design for Harrow's civic centre has begun," says the *Harrow Observer*. Apparently the civic centres sub-committee intends to visit "a number of fairly modern town halls and municipal buildings. . . When the choice is centred upon one, two or three buildings, it is proposed that the architects of the buildings might be invited to suggest the best possible layout of the area and the design of the buildings to be erected."

A correspondent writing to the *East Anglian Daily Times* has described the ARCHITECTS' JOURNAL as a "semi-technical" journal which "appears to be strongly biased in favour of the so-called 'contemporary' style."

A new war memorial being built at Michigan has a novel feature. One side is being left blank for future names.

Frank Lloyd Wright received his honorary degree not from Bangor University, as we announced two weeks ago, but from the University of Wales. The ceremony was held at one of the university's four colleges —at Bangor.

A plan to plant trees on Broadway has received strong opposition from advertising men. They say it will interfere with neon signs.

Sir Howard Robertson, PPRIBA, has been elected to the board of the Savoy Hotel Ltd. He designed the Savoy's main forecourt in the late '20's, and has been responsible for other architectural and decorative work in the building.

Michael R. Blampied, A.R.I.B.A., and R. A. Nigel Biggar, A.R.I.B.A., have dissolved by mutual consent the practice carried on between them under the name of Blampied & Biggar. Mr. Biggar is taking into partnership Mrs. Sylvia Elizabeth Bigger, A.R.I.B.A., and will be continuing to practise at 33, Halkett Place, Jersey, C.I. (Tel.: Jersey Central 600), under the name of Nigel Biggar & Partners. Mr. Blampied will practise from 3, Southampton Place, W.C.1 (Tel.: Chancery 3787), under the name of Michael R. Blampied & Partners, where he will be pleased to receive trade catalogues.

H. L. Waterman & Partners, consulting engineers, have changed their address to 84, Eccleston Square, S.W.1 (Tel.: Tate Gallery 9157/8/9), where they will be pleased to receive trade catalogues.

Basil Spence & Partners will open a new office at 1, Canonbury Place, N.1 (Tel.: Canonbury 7175), on September 3, 1956, where they will be pleased to receive trade catalogues. This is in addition to the present offices at 48, Queen Anne Street, W.1, and 40, Moray Place, Edinburgh, 3.

L. Robinson, L.R.I.B.A., has resigned his appointment as architect and surveyor to Thomas Tilling Ltd., and subsidiary companies, and has commenced private practice at 120, Moorgate, E.C.2, where he will be pleased to receive trade catalogues.

Peter A. Clarke, A.R.I.B.A., has become an associate in the firm of Norman & Dawbarn.

Philip Hicks, A.R.I.B.A., has set up practice as an architect and landscape designer at 6, Beechwood Avenue, Kew Gardens, Surrey, where he will be pleased to receive trade catalogues.

(More news on page 187)

EDITORIAL BOARD: (1) *Consulting Editor*, F. R. Yerbury, O.B.E., Hon.A.R.I.B.A. (2) *House Editor* J. M. Richards, A.R.I.B.A. (3) *Executive Editor*, D. A. C. A. Boyne. (4) *Editor Information Sheets*, Cotterell Butler, A.R.I.B.A. (5) *Editorial Director*, H. de C. Hastings.
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* To preserve freedom of criticism these editors, as leaders in their respective fields, remain anonymous

The Editors

COLOUR IN SCHOOLS—AND ELSEWHERE

THE second edition of MOE's Building Bulletin 9 *Colour in Schools*,* which has just come out, is in effect a re-writing, for about a third of the matter it contains is new. This reflects the speed at which our knowledge of colour and light is deepening. One purpose of this new edition is to propose a new range of colours for use in schools which will be in line with the 101 colours of B.S. 2660 : 1955. This new range is to replace MOE's original Archrome Range and is to be called "Archrome 2." At first sight it is disconcerting to notice that no less than 20 out of the 47 original Archrome colours have fallen by the wayside—either because they were not much used or because experience has shown that we can better them. If the Archrome colours suffer such a high mortality rate in the bare three years or so that they have existed what is going to happen to the 101 colours which have a programme to fulfil which is altogether more exacting? The answer is that this rapid turn-over is a sign of critical vitality. Before the compilation of the Archrome range, there had been no systematic thinking about colour by architects, and indeed there had been no published thinking of any significance apart from Amedee Ozenfant's articles in the *Architectural Review*, since the beginning of the modern movement. The second purpose of this edition is to take notice o reflected light—a matter which we believe was first drawn to architects' attention by Dr. Hopkinson's articles in the JOURNAL of August 5 and September 16, 1954—and to the need to vary the sky brightness factor. In other words the business of calculating the daylight factor at the back of a classroom is quite different from what we thought even in 1953. One practical result of this is that it is now feasible to design a classroom with single side lighting and a low ceiling and part of this new edition of the Bulletin is devoted to the practical and aesthetic problems which this raises. A solution is proposed, and in a footnote to the discussion on it, the point is made that "in design one is concerned with apparent brightness (luminosity) rather than physical brightness (luminance) or the relative rather than the absolute value of colours." This useful observation, which chimes in so well with J. M. Waldram's studies of artificial lighting

HMSO 5s.

*except Le Corbusier, whose Unité will be on another site: see page 184.

(see JOURNAL for July 22, 1954), seems to epitomise what we have learnt in the application of colour during these few years. The grand old men of British Architecture may with some justice point out "What little thinking you boys did before you plunged into that massive schools programme of yours." To which it may be replied that nobody outside the orbit of school designing has been thinking to such purpose since, and that never since the rebuilding of the English Parish Churches in the XVth century has a single building programme been made to contribute so much to the good of architecture as a whole.



WORTH EVERY LIRE

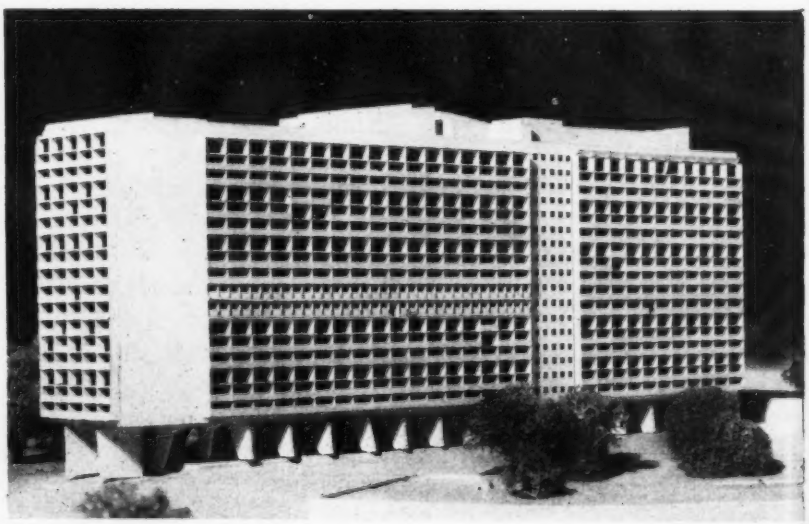
Large, shiny and well illustrated, from Italy comes *Come si Costruisce Oggi nel Mondo*, which means exactly what it says—"How it is built in the world today." Not, however, a survey of building methods of the world, but a study of the way some twenty contemporary buildings of world standing have been designed and built. The author, Franco Carpanelli, who teaches at Bologna University, has given his subjects an astonishingly thorough treatment: each building is illustrated with drawings — *working* drawings wherever possible—and photographs; *progress* photographs as well as the usual glamour angles of the finished building. There is a complete description of each building, and a full, illustrated biography of each architect.

*

The range covered is gratifyingly large; engineers like Nervi and Buckminster Fuller, individualists like Aalto and persistent collaborators like Gropius, old masters like le Corbusier and new ones like Raphael Soriano, the mighty dead like Eric Mendelsohn and the uncommonly quick like Powell and Moya. No arrangements for English distribution of this remarkable and useful book seem to have been made yet, and it is going to be pretty expensive—Hoepli are charging a cool 8,000 *lire* for it in Italy—but if you have the money it's more than worth it, and every school library should have it anyhow. The main text is in Italian, admittedly, but most of it is only identifying captions to surprisingly self-explanatory illustrations. In any case, every school nowadays has a ploy-boy who is only too glad to translate from Italian, if given half a chance.

HOW A NEWS-STORY BREAKS

My harder-bitten colleagues on national newspapers are always telling me that true journalism has been killed by the Press hand-out. Where, they ask, is the chance of getting a scoop in a system which excludes the personal interview? I can just imagine how envious those tycoons are feeling as they meditate on the success of three live-wire interviewers who approached Frank Lloyd Wright when he came to London. "What do you think of Architecture Today?" asked a JOURNAL editor—trying to conceal his excitement and his tape-recorder—as he handed the Master an Irish whiskey. "Architecture," said FLW, "is going up a one-way street—to a dead end." A BBC reporter, who knew all about the sort of buildings they have in the Lloyd Wright country, put his question another way. "What do you think," he asked, "of skyscrapers?" The Great Man replied without hesitation: "Architecture," he said, "is going up a one-way street." "To a dead end," he added, and somehow this gave his statement greater point. And then, by chance, my fellow-columnist, Abner, got wind of FLW's visit to London and rang him up in his intrepid manner, seeking a highly-personal comment for publication in the *Architect and Building News*. I don't know quite what question he asked, but I see from the current issue of the paper that Mr. Wright feels most strongly that architecture is going up a . . . All right, you news editors. Call those hot-news boys in; they deserve a vacation.



A model of one of the contributions to the "International style" at Berlin's 1957 Exhibition. If you cannot guess the architect's name, see Astragal's note on page 185.

MUST WE RETHINK?

Le Corbusier's contribution to Interbau—the Berlin international housing exhibition in 1957—will be another *Unite d'habitation*, sub-titled *Typ Berlin*. Scrutiny of the available photographs (one appears on page 184) suggests that *Typ Berlin* is only a cross between a *Typ Marseille* schedule of accommodation, and a *Typ Nantes* form of construction. The master clearly thinks he has found the right answer and intends to stick to it, but—with all due diffidence—one cannot help asking oneself if a dwelling-type conceived with a view to erection in French seaside towns, one with panoramic views of the Mediterranean, is necessarily quite the thing for an inland German metropolis, commanding a panoramic view of the railway yards.

*

Admittedly Corb. isn't the only offender in this; Gropius and TAC seem to be thinking of an American college campus, Vago of a pretty Paris suburb, Niemeyer of a palm-girt site on the South Atlantic. Somehow one had got it into one's head that close adaptation to factors of climate and site was a hallmark of modern architecture. If all these various solutions turn out to be equally workable in Berlin's lethal frosts and sweltering airless summers then quite a lot of people have got to do quite a lot of—wait for the good word—Re-thinking.

THE NEXT TIME YOU SEE PARIS

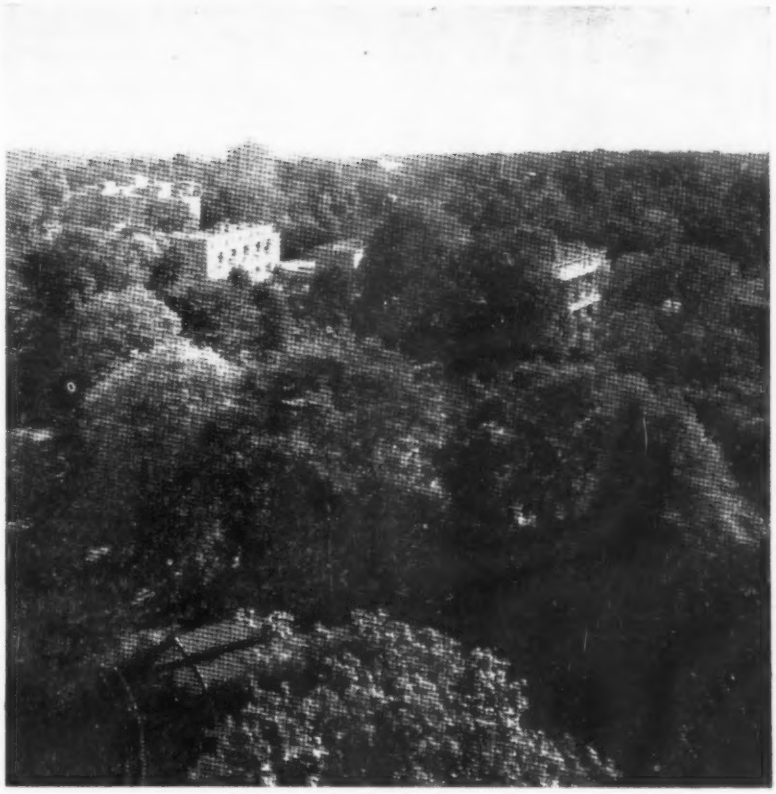
A couple of French-type books for the next time you see Paris have come my way recently. One, called *Royal Chateaux of Paris*,* is an attempt to do for the Paris Palaces what Lees Milne lately did for the Antiquities of Rome, and—if the strictures of that upstart AJ column *Not Quite Architecture* are to be trusted—Rowe has succeeded where Milne failed. He begins with a touching picture of tourists stumbling blindly from one of the great Chateaux, numbed, defeated and exhausted by excess of tarnished splendour and miles of echoing corridor. His aim, he says, is to communicate to them some of his own enthusiasm for these palaces and their histories, and he goes at it with gusto and a wealth of erudition which is sometimes a bit disorderly, but full of useful facts; *e.g.* that Chantilly is closed on Fridays as well as Mondays, unless these be National Holidays, and also on other days of the week if there are horse-races, and completely closed from November to March. In other words it's the sort of book to take with you, and read up the night before a visit, if only in order to infuriate your friends who only know about architecture with information such as that Mary Queen of Scots would "dance until she fell from fatigue" at St.-Germain-en-Laye, or that Louis XIII was unable to do anything whatever with his mother at the Luxembourg.

Your architecture-only friends will have armed themselves, in any case, with the other book in question, Pierre Lavedon's *French Architecture*,† now available in a business-like Pelican translation. This is a book that nobody loves, dry, academic, surgical, but it is extremely efficient in its coverage of the facts of the matter in hand, and it is an extremely useful tome to have in the Anglo-Saxon tongue. Also, of course, it only costs five bob.

ASTRAGAL

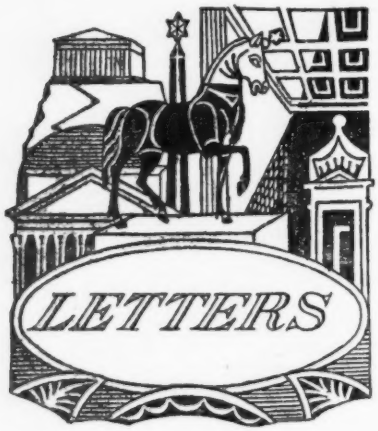
*Royal Chateaux of Paris, by Vivian Rowe. Putman, 25s.

†French Architecture, by Pierre Lavedon, Pelican Books, 5s.





These pictures are used in an Architectural Press book, Tomorrow's Landscape (21s.) *to illustrate the point that the new height of buildings is producing a new urban landscape. The top picture is of LCC flats at Wimbledon (Architect to the Council, Dr. J. L. Martin). The one below is of flats in Copenhagen, where material from the foundations has been used to build a great amphitheatre. This book, by Sylvia Crowe, will be published tomorrow.*



Jeremy Dodd, A.R.I.B.A.

Cyril Carter of Carter and Co. Ltd.

Hans Tisdall

O. W. Lloyd

Functional Offices

SIR,—The recent AJ frontispiece (July 19, 1956) of Electrin House and the illustrations of the dock labour board building and the Shell building proposed for the South Bank indicate just how little progress has been made towards establishing a common (functional) office building design idiom. While current city idiom has become so antiquated and expensive that statements, depreciating the high cost of such buildings, like the one by the chairman of the City of London Real Property & Co., quoted by Eric de Maré in the same AJ, lead one to hope that economic considerations will lead to the adoption of an idiom in harmony with current developments in design and technics.

Everyone knows that most schools are built to cost limits, imposed by the Ministry of Education, which also controls almost every other requirement. The system has produced the schools the nation needs and is producing a national and regional idiom of functional school design. If office owners and users were represented on one small National committee, it is possible they *might* agree on functional standards for the present day office, reasonable cost limits per square foot based on buildings like Electrin House or similar and standard external cladding panels which would get the benefits of mass production. These buildings would soon be understood by the man in the street to symbolize the efficient business.

Planning permission should be witheld on the good grounds of national economy from the office building which grossly exceeds the cost limits: the old and massive masonry clad job with its unacceptable appeal to our emotions via its castle-like suggestion of despotic power will be out once and for all —we can't afford it.

To return to the cladding panels, it ought to be possible to standardize sizes and limit the types to about three, i.e., to cater for the room with normal office sill height, the store or cloakroom and the windowless store or service space. The widths might reasonably be based on a 4 ft. module which as well as being generally convenient, would encourage the use of uncut sheet materials for linings. As the capacity of the building industry is said to be overstretched, perhaps one could turn to the motor industry and obtain pressed sheet metal panels for a reasonable price. Naturally standard panels would have to provide for integrated fire resistance as well as insulation and weather tightness.

Is it possible that office buildings may be the next in line for logical re-appraisal by their owners?

JEREMY DODD.

London.

Duplications In Art

SIR,—ASTRAGAL, in your issue of July 26, raises an issue which, as he knows only too well, is difficult to answer.

Where shall we find general agreement on whether or not a modern work of art is "great"—or a "work of art" at all, for that matter? So far as I myself and my firm are concerned this goes much deeper and wider than the Tisdall mosaic.

We were asked, some three or four years ago now, by an architect of accepted distinction, to consider the production of a painted tile mural for a new church. The full size cartoon was a very beautiful work. The designer discussed techniques with us and with the craftsmen who would carry it out, and we got down to it. I was myself uneasy, apprehensive about it; not about the ability of our craftsmen, skilled and experienced as they are, but of the "rightness" of the thing. Should not the designer paint it himself? He had a "feeling for pot," as we say, and could quite well have done it with the resources of our knowledge of processes, of glazes and their application, of our firing facilities, at his disposal. But it was a long job and he was so situated as to be unable to take it on. In the event I believe it was regarded as very successful. That commission was followed by another, for the same architect and designed by the same hand.

I have seen the first of these works and thought it quite fine. My original uneasiness was eased but, perhaps, not quite overcome. We had done our job and done it well. Whether or not it is a "great work of art" is quite another matter. A critical sense, as a Japanese once said of business ethics, can be "most inconvenient for business purpose." I must emphasize that in both these cases—and in the case of another, larger mural of a quite different type, since completed, for another architect and by another designer—the designer has worked in very close touch with our craftsmen, spending much time with them on the factory, discussing colours, textures and interpretation.

Now for Tisdall's mosaic mural. This thing arose through my being in Tisdall's studio one evening with Frank Dark and seeing there a large "abstraction" of his which caused me to say "wouldn't that make a lovely mosaic." That started it.

An entirely new technique had to be worked out—different from that employed in the production of the commercial uses of "mosaics"—almost entirely for floors, using tesserae mechanically produced and of regular shape. Here again, Hans Tisdall worked very closely with our people. They were receptive—to a completely new idea—and he succeeded in "putting it across" to them. But he spent a lot of time on it, adjusting, altering. He dealt with the "angle and spacing of the individual pieces."

A "great work of art?" I don't know. I find it a most satisfying piece of decoration, lovely colour and texture, and a thing I am glad to have seen done.

To answer Astragal's specific questions specifically. "These duplications" *are* probably necessary today. Of course craft and design should be combined. But the mosaicist would probably need to have another string to his bow, if he must live. . . . And does not this co-operative arrangement we are discussing make available fine decoration that would otherwise not be considered in these days when time is of such paramount importance and buildings are put together with all eyes on the calendar?

May I ask Astragal a question? Were not the works of the great masters, whose works are accepted today as "great works of art," produced in what were workshops rather than studios? Is it not likely that the Ravenna Mosaics were, perhaps, not one man's conception but the works of many under his direction?

CYRIL CARTER.

Poole.

SIR,—With reference to Astragal's comment on "Interpreted Art" in relation to my mosaic at Carters Poole Pottery Showroom, I must correct the impression that a design of my hand was rendered by a technician into mosaic.

This work was designed as a mosaic, a full sized cartoon prepared and drawings made giving the positions of every single stone, as well as directions of flow and colours. Only after this work was done and the trials of the new technique satisfactorily completed was the actual making begun.

The carrying out was a joint effort between the mosaicist and myself, who worked in complete accord. This collaboration has been one of the happiest experiences in my career and I am completely dedicated to this fascinating art form and hope to do many more mosaics. To my mind the design and the craft of mosaic is completely indivisible.

HANS TISDALL.

Sussex.

Churches In Peril

SIR,—Your leading article in the JOURNAL for July 26 draws attention to the peril facing hundreds, perhaps thousands, of churches, which might at any time be declared "redundant" by diocesan committees. For practical needs there are too many churches in many districts, and not enough in others; unfortunately the finest architecturally are often where they are least needed.

Paradoxically it is in the towns rather than in the country that the greatest peril lies. Visually a good second-rate church in a city centre is often of more value than a first-rate one in open country, and often churches of no special value themselves contribute essentially to the townscape. What would Worcester, or Shrewsbury, or York be without their redundant churches? Of a Norwich so deprived one just does not dare to think. Perhaps even more precious than the numerous churches of ancient cities are the solitary survivors of a remote age in places which grew fat in Victorian times, such as Leeds.

In Bristol, which is both an ancient city and a big industrial centre, the problem is well on the way to solution. The city has a collection of churches unrivalled for its architectural variety and for its contribution to townscape and skyline. Some time ago there were hints than even some of the churches undamaged in the blitz might disappear; fortunately there was an outcry and all the intact churches in the city centre seem now safe, the axe having fallen on second-rate Victorian buildings in the inner districts. The five bombed churches were the subject of an admirable report prepared by Donald W. Insall, A.R.I.B.A., who recommended the preservation of at least three of them. Of these Temple is now in the care of the Ministry of Works—a magnificent ruin, and the lovely slender Georgian Gothic spire of St. Nicholas has been repaired by the parish authorities themselves, even though the future of their gutted nave is uncertain. Triumphs of anti-philistinism! The only major doubt now is the fate of the charming little tower of St. Mary-le-Port, full of local character, which may yet be saved. The other two bombed churches are not specially valuable.

If Bristol can preserve even bombed churches merely because of their aesthetic value, surely other places can see the way, even if the Church does not find the money. The difficulties facing the Church must not be underestimated; the more money spent on redundant churches because of their architectural value (unless that money was contributed for that very reason) means the less on new estates where the situation is sometimes desperate; even where a "church" is built it is often only a dual-purpose hall, and the loss is not only the churchgoers' when the district is deprived through lack of funds of the very building which is traditionally the architectural as well as the spiritual focus of any neighbourhood. Even so, it must be remarked that the Church often seems too parish-bound in its attitude; sometimes it is suggested that it is almost a sin for a member of the Church of England to attend regularly a church outside his own parish. There may be many reasons, including architectural ones, for a person preferring to worship elsewhere. And only a Philistine would suggest that architectural setting has no bearing on worship; there must be many who, like the writer, have had their religious faith at least strengthened by acquaintance with fine churches.

But whatever is said, it remains unarguable that money subscribed for the repair of historic churches should be used specifically for that purpose, and not at the discrimination of diocesan committees who have other standards of value, however unworldly.

O. W. LLOYD

Bristol.



BUILDING

Estimating Centre

A second-year course in builders' estimating is to be held by the Department of Building, Structual Engineering and Surveying of the Hammersmith School of Building and Arts and Crafts. Applications for entrants should be made at Lime Grove, Shepherd Bush, W.12, during the week commencing September 17 (between 6 p.m. and 8 p.m.).

COMPETITION

Rochdale College

The MOE and the RIBA are considering the proposal by the county borough of Rochdale to hold an architectural competition for the design of a £1 m. technical college.

ABS

Archimation Ball

The ABS Ball, which will be held this year at Grosvenor House on December 12, will have "Archimation" for its theme, and will be in aid of the ABS Homes Trust. "Archimation" is a hybrid word coined from "Architect" and "Automation." Patron of the ball will be Sir David Eccles, Minister of Education; Patrick Buchan Hepburn, Minister of Works; Viscount de L'Isle; Col. Gontran Goulden, AA President; D. Plaskett Marshall, IRA President; Lt.-Col. A. E. Henson, IAAS President; and N. James Rushton, FAS President.

MOE

Revision of School Colour Booklet

A second edition of "Colour in School Buildings," Building Bulletin No. 9, has been published by the Ministry of Education (HMSO, price 5s.). The main alteration arises from the publication of the New British Standard colour range (BS 2660: 1955 Colours for Building and Decorative Paints). From this a selection has been made of 54 colours, which experience suggests will be the most useful for school buildings, and these are published in this bulletin as the Archrome 2 range. Each colour is designated by the BS serial number and the approximate Munsell reference. Apart from some minor alterations in the text, there are two important additions. There is a new section on the design of reflected light, a subject recently studied in detail at the Building Research Station, and another on the colour of floors.

The Bulletin is discussed in this week's editorial.

MOHLG

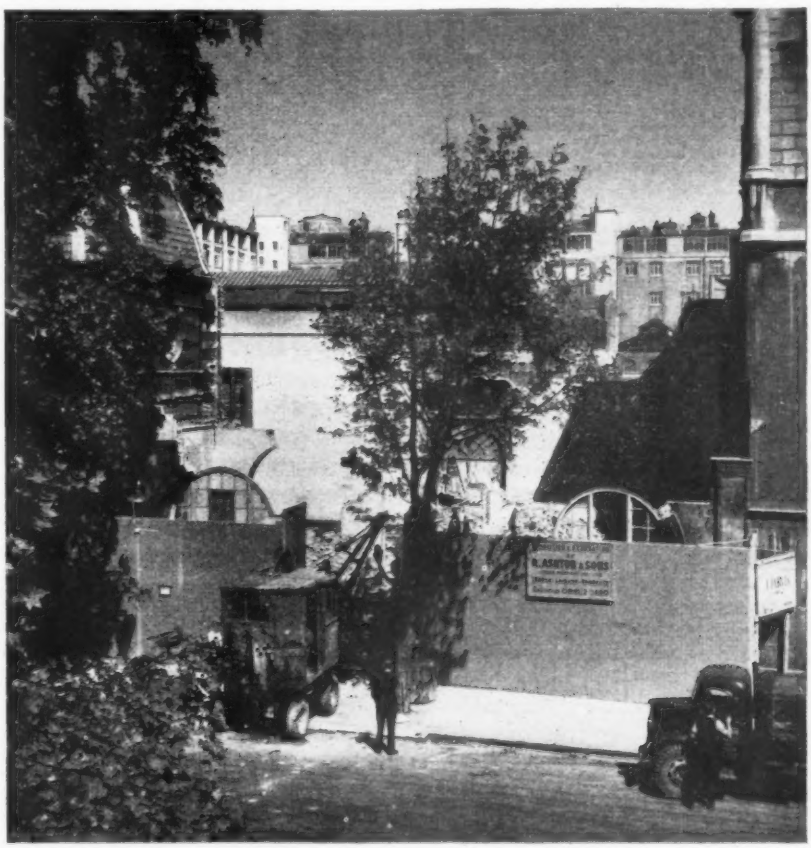
The Future of Local Authorities

Duncan Sandys, the Minister of Housing and Local Government, is setting up two commissions with powers to recommend: (1) Disappearance of very small counties, district councils and parishes, which will be amalgamated with large units. (2) Creation of a new kind of council to administer built-up industrial areas such as the Black Country, Merseyside and Tyneside. (3) Speedy promotion of boroughs with over 100,000 population to the grade of county borough, with complete control of local affairs.

MOTCP

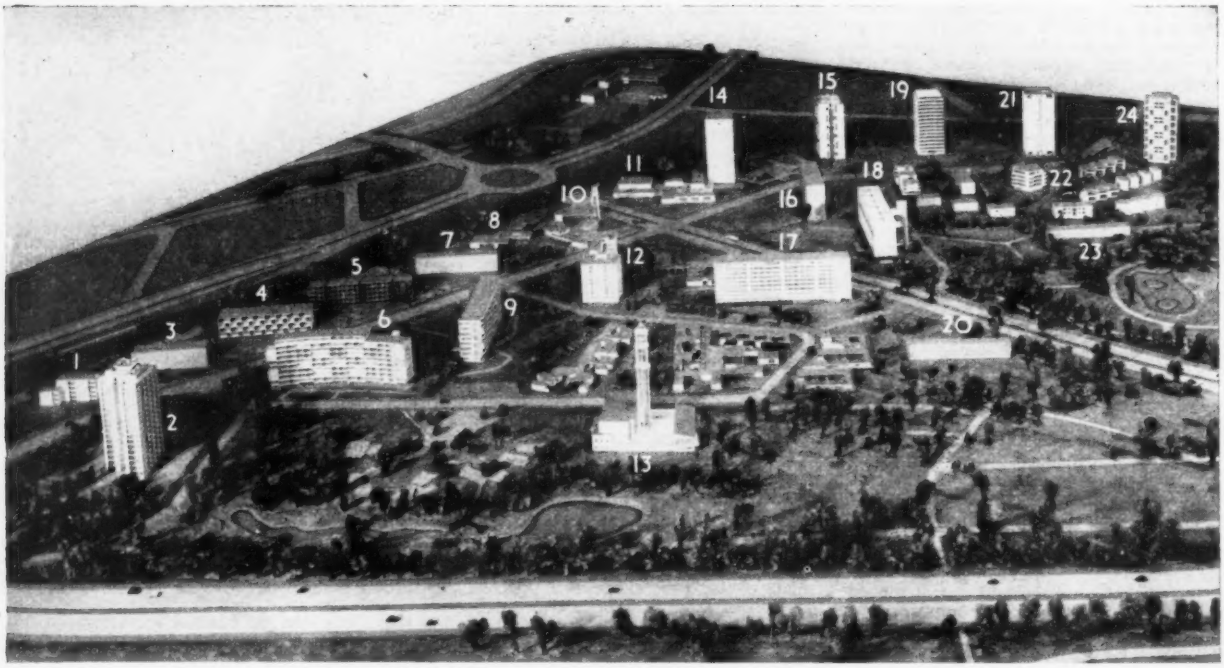
Riverside Highway

Harold Watkinson, the Minister of Transport and Civil Aviation, has consulted his departments as well as officers of the LCC and the Port of London Authority on the proposal for a riverside highway from Blackfriars to Battersea Bridge. A preliminary report has been made and is being considered.



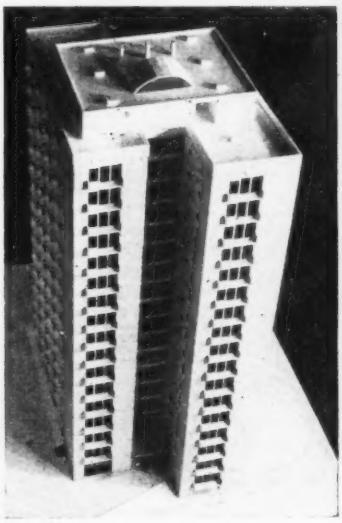
Work has already begun on the demolition of the Imperial College of Science in Kensington to make way for the new building by Norman and Dawbarn.

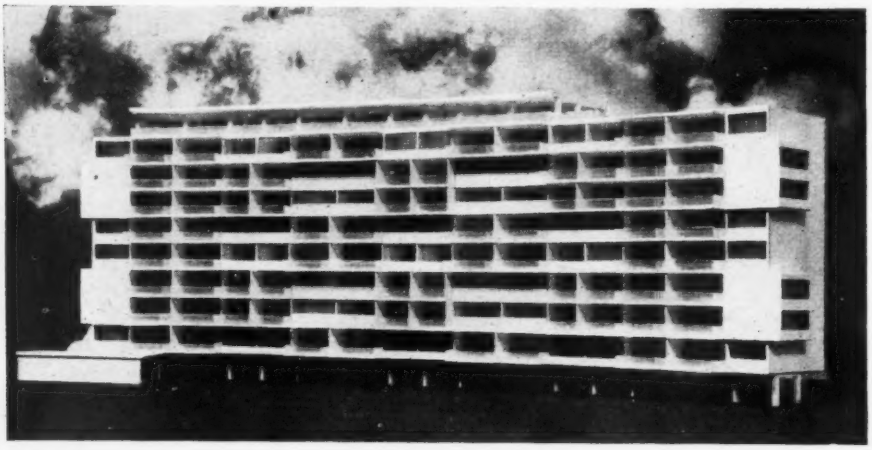
SOME PROJECTS FOR THE INTERNATIONAL

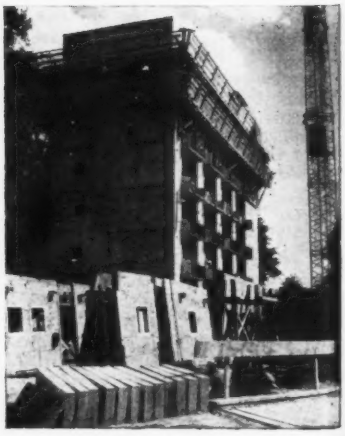


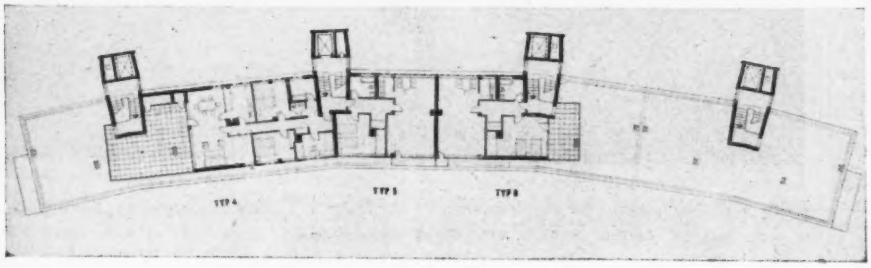
KEY

1. 4-storey flats by Alexander Klein (Israel).
2. 17-storey flats by Klaus Muller-Rehm and Gerhard Siegmann (Berlin).
3. 4-storey flats by Richard Henning (Berlin).
4. 4-storey flats by Gunther Gottwald (Berlin).
5. 4-storey flats by Wassili Luckhardt and Hubert Hoffmann (Berlin).
6. 9-storey flats by Walter Gropius (USA) and Wils Ebert (Berlin).
7. 4-storey flats by Paul Schneider-Esleben (Dusseldorf).
8. Children's nursery by Gunther Wilhelm (Stuttgart).
9. 8-storey flats by Pierre Vago (Frankreich).
10. Church by Willi Kreuer (Berlin).
11. Cinema and restaurant by Ernst Zinsser and Rudolf Plarre (Hanover and Berlin).
12. 8-storey flats by Alvar Aalto (Finland).
13. Church by Ludwig Lemmer (Berlin).
14. 17-storey point block by Luciano Baldessari (Italy).
15. 16-storey point block by J. H. van den Broek and J. B. Bakema (Netherlands).
16. 8-storey flats by Egon Eiermann (Karlsruhe).
17. 10-storey flats by Fritz Jaenecke and Sten Samuelson (Sweden).
18. 8-storey flats by Oscar Niemeyer (Brazil).
19. 16-storey point block by Gustav Hassenpflug (Hamburg).
20. 3-storey flats by Paul G. R. Baumgarten (Berlin).
21. 16-storey point block by Raymond Lopez and Eugene Beaudouin (Frankreich).
22. 4-storey flats by Otto H. Senn (Switzerland).
23. 1½-storey housing by Hans Scharoun (Berlin).
24. 16-storey point block by Hans Schwippert (Dusseldorf).



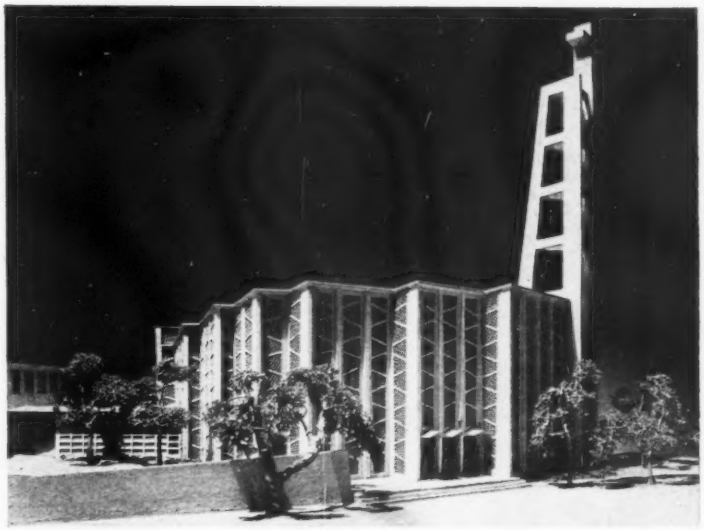




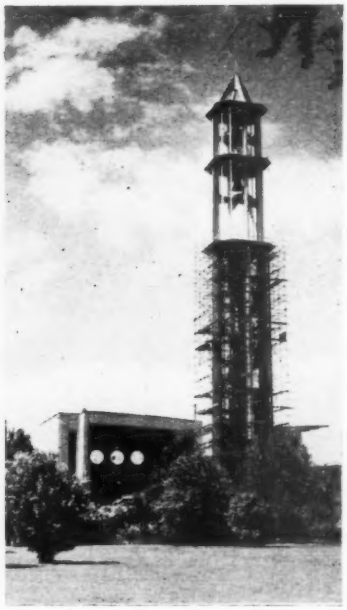


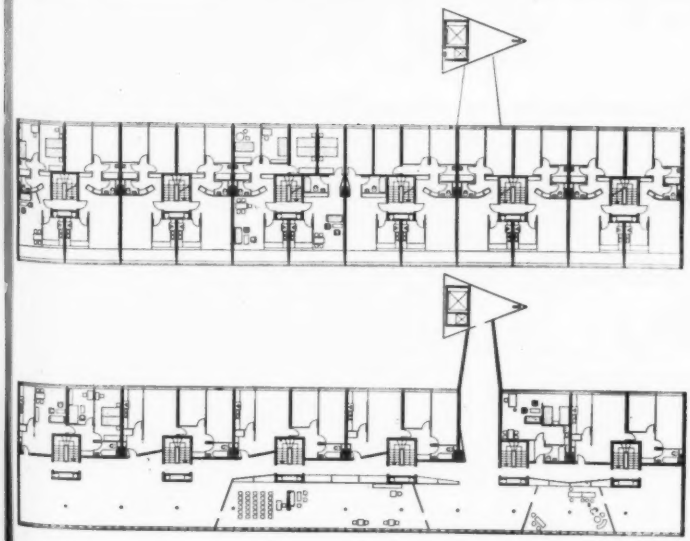
EXHIBITION, BERLIN, 1957

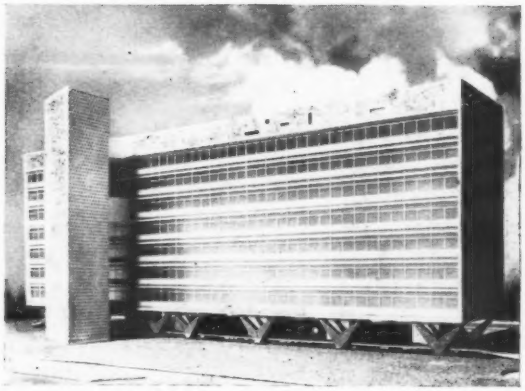
One of the main features of the International Building Exhibition to be held in Berlin next year will be the rebuilding of the Hansa District in the Berlin Tiergarten to designs by 60 architects from Germany and elsewhere. Some of these buildings—a few are illustrated in these pages—will house exhibitions of the work of interior designers and furniture designers. Opposite page: bottom left, model and plans, flats by Walter Gropius and Wils Ebert. (No. 6 on key photo.) Opposite page: bottom right, model and progress picture of 17-storey flats by Klaus Müller-Rehm and Gerhard Siegmann (No. 2). Right: church by Willi Kreuer (No. 10). Below: model and progress picture, church by Ludwig Lemmer (No. 13). Below: plans and model, flats by Oscar Niemeyer (No. 18).





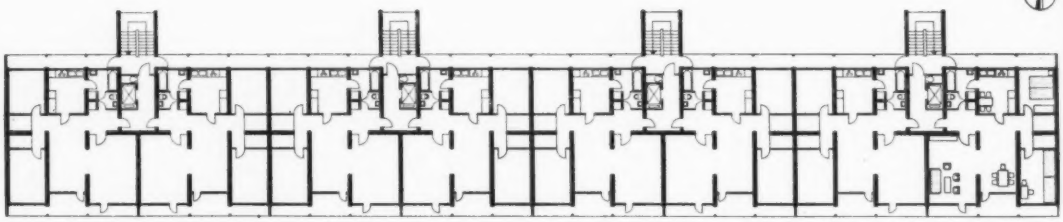




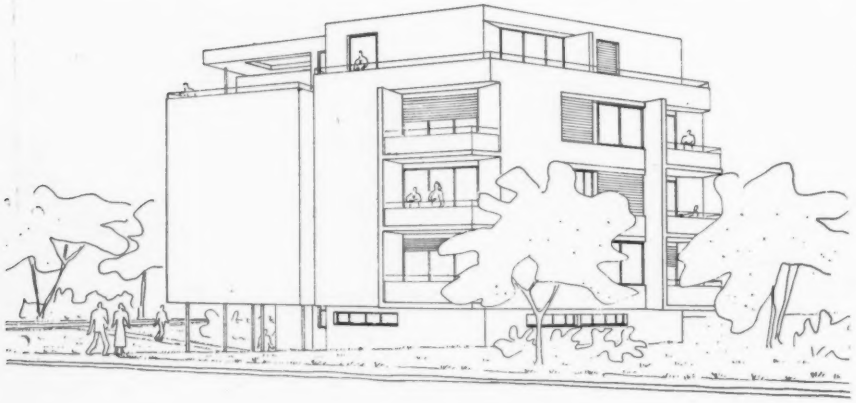


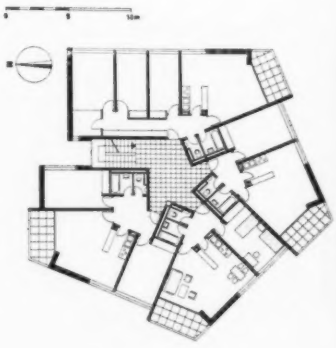
MORE PROJECTS FOR THE INTERNATIONAL E



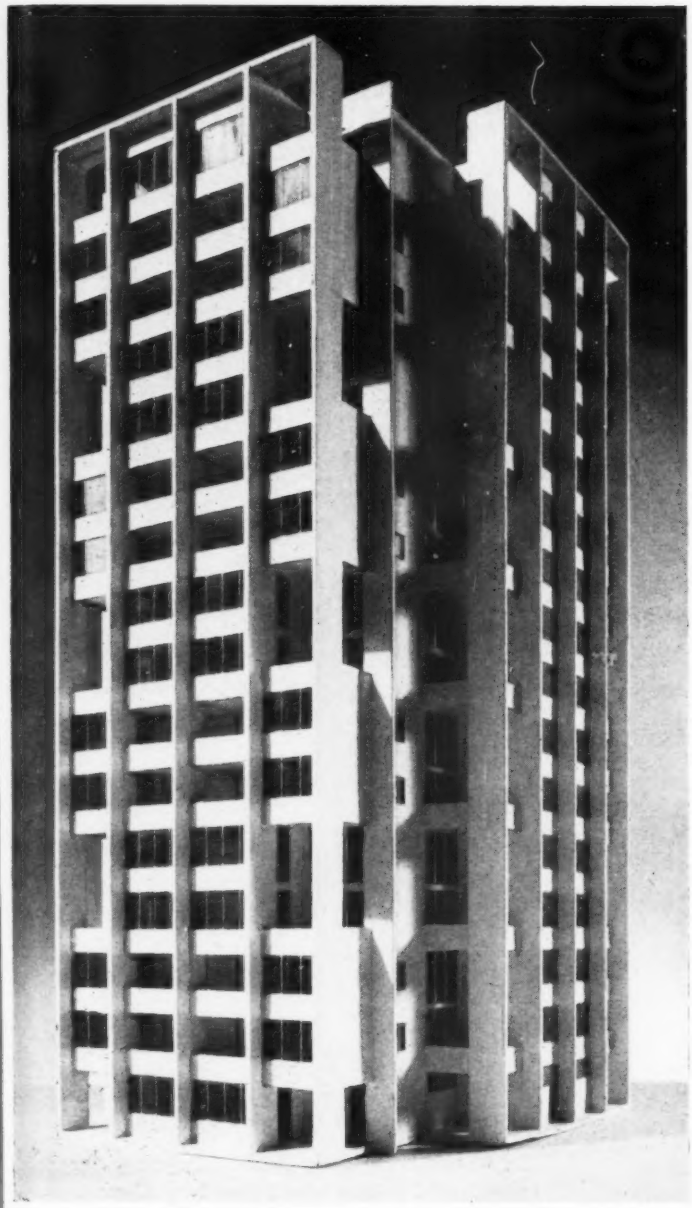


Above: 10-*storey flats by Fritz Jaenecke and Sten Samuelson.* (*No.* 17). *Below:* 4-*storey flats by Otto Senn.* (*No.* 22). *Interior designers from Switzerland will be responsible for the interiors of this Swiss architect's building. The object of the live architecture exhibition and related displays is to demonstrate problems of "Tomorrow's Town" in a way that the public can understand—not in a highly-specialised way.*

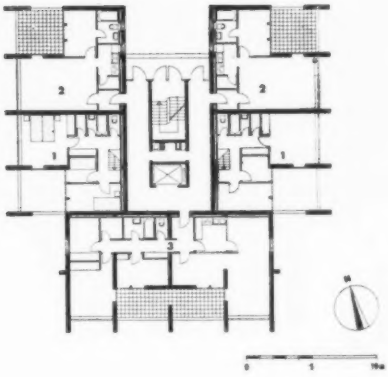




EXHIBITION, BERLIN, 1957



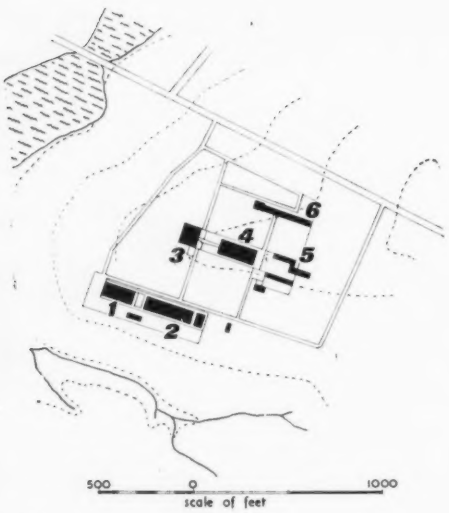




Left and above: model and plans of 16-storey point-block by Hans Schwippert. (No 24).
Below: another general view of the "live" architecture exhibition site.



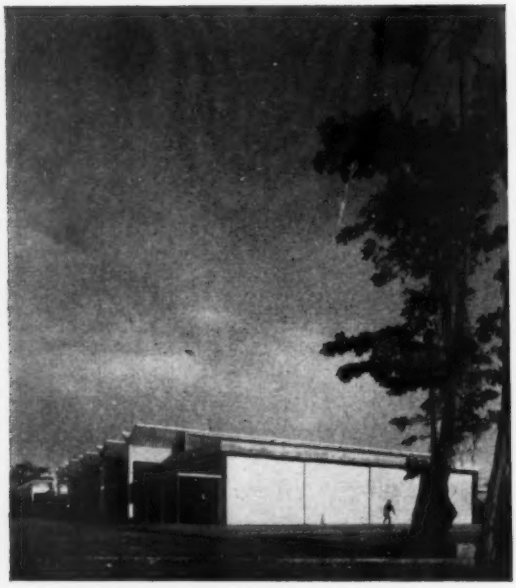
COLLEGE OF TECHNOLOGY, KUMASI, GOLD COAST

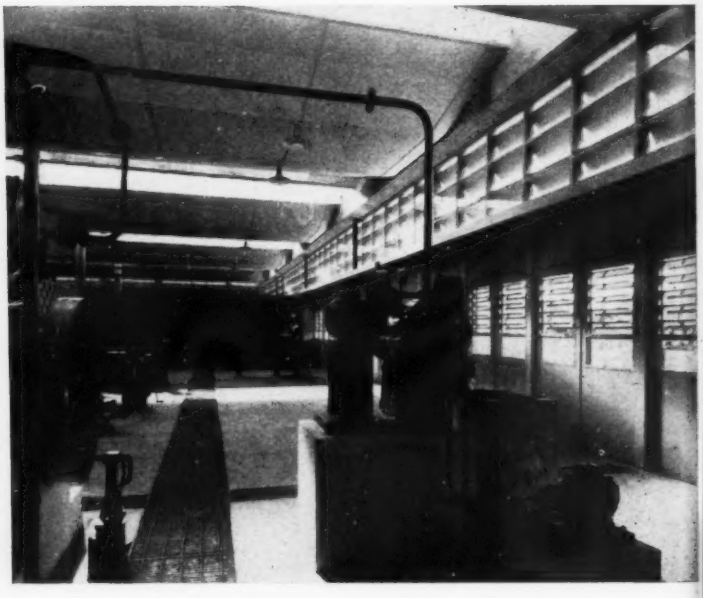


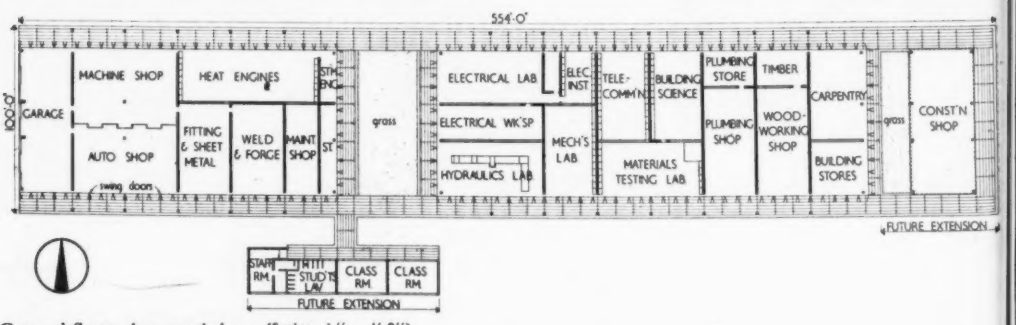
Site plan

KEY
1. Workshop block
2. Workshop laboratories
3. Library
4. Pharmacy
5. Science blocks
6. Classroom block

Illustrated here are some of the important buildings so far completed at the Kumasi College of Technology, designed by James Cubitt, Scott and Partners. Kumasi, the second largest city of the Gold Coast, is the capital of the Ashanti, a district which produces gold, rubber, cocoa, palm-oil, tobacco and mahogany and has been under British rule since 1901. Kumasi, which is about 7° north of the Equator, lies in densely-wooded country north-east of the coastal city of Accra. The altitude is about 900 ft. which means that, although the climate is oppressive, the nights are fairly cool. Due to the high humidity the shade temperature never exceeds 100° F. When completed the college will comprise some hundreds of individual buildings, including teaching blocks, administration and ceremonial buildings, students' residences and over 200 staff houses. The architects were approached late in 1951 and agreed to undertake the planning of the college on a site about 2½ miles square. In spite of the size of the site the grouping of the main buildings presented difficult problems. A stream called the Wiwi, which has a fair flow of water, muddy in the rains and clear in the dry season, crosses the site diagonally. One of the most important architectural problems was to select areas where the natural ground level helped in planning the buildings to face north and south. This arrangement is essential in order to get the advantage of the prevailing south breeze



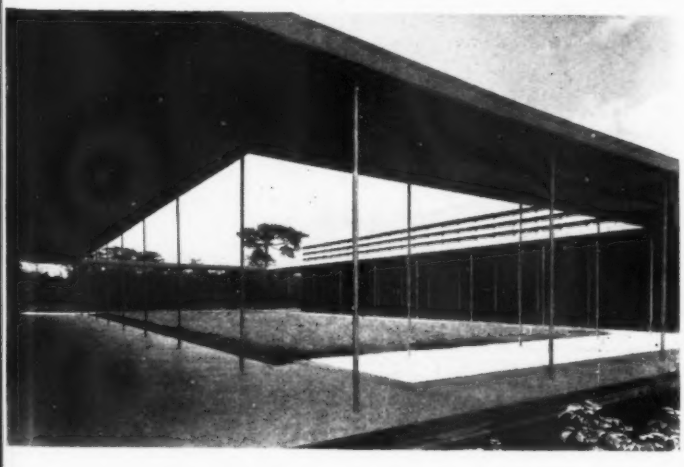




Ground floor plan, workshop (Scale: $\frac{1}{16}$" = 1' 0")

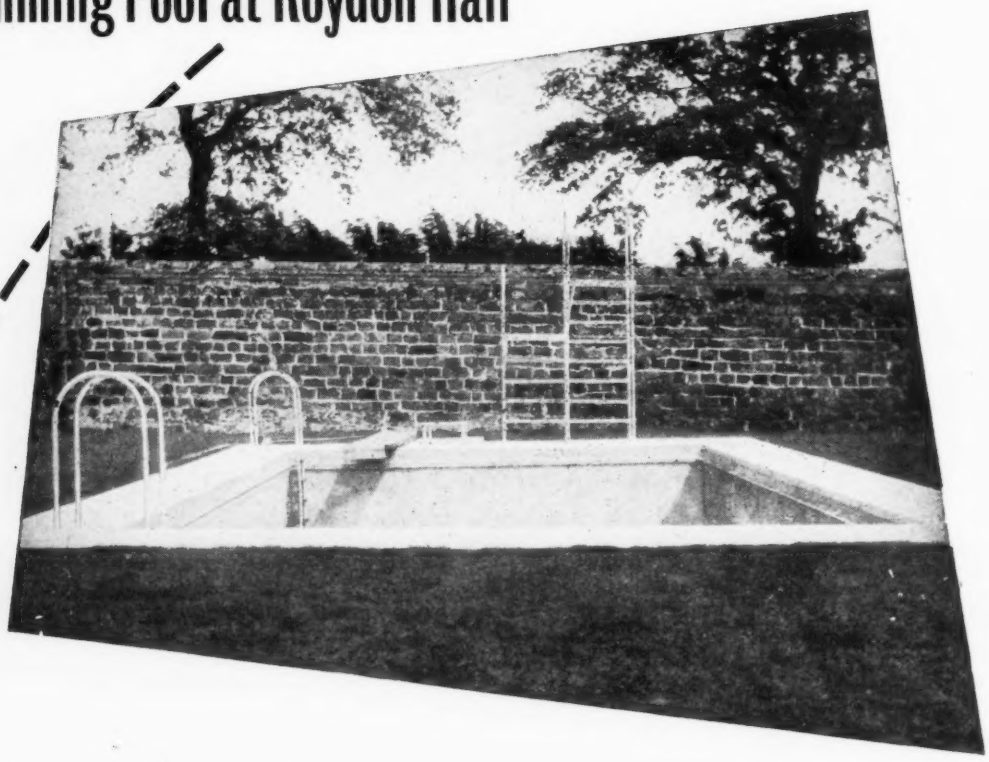
WORKSHOP BLOCK





and to prevent the heat of the south-east and south-west sun from penetrating the buildings. The first permanent buildings to be erected on the site were the engineering workshops, illustrated on this page and opposite. Above and opposite, left, is the building containing workshops, seen from the north-west. This building is 533 ft. long by 100 ft. wide, including a gap of 60 ft., shown left, which divides the floor area into two parts of six and eight bays respectively. The photograph on the right, opposite, shows the clerestory lighting over the covered way which runs around the perimeter of the building. This clerestory consists of individually-controlled, power-operated, pivoted

Swimming Pool at Roydon Hall



In the lovely grounds at Roydon Hall, Norfolk, a swimming pool has been constructed for John Alley, Esq., J.P. The pool is 34 ft. long and 20 ft. wide, one end being 3 ft. 6 ins. deep increasing in the middle to 8 ft. and decreasing at the other end to 6 ft.

'PUDLO' Brand Waterproofer was specified to render the walls and floor waterproof, the bath having been built of brickwork with an ordinary non-waterproofed concrete floor 15 ins. thick composed of 4. 2. 1.

The Waterproofing was effected by means of an internal lining of waterproofed cement and sand composed as follows :— 2 parts of coarse washed sand, 1 part of Portland cement, 5 lbs. 'PUDLO' Brand Powder, to each 100 lbs. of cement.

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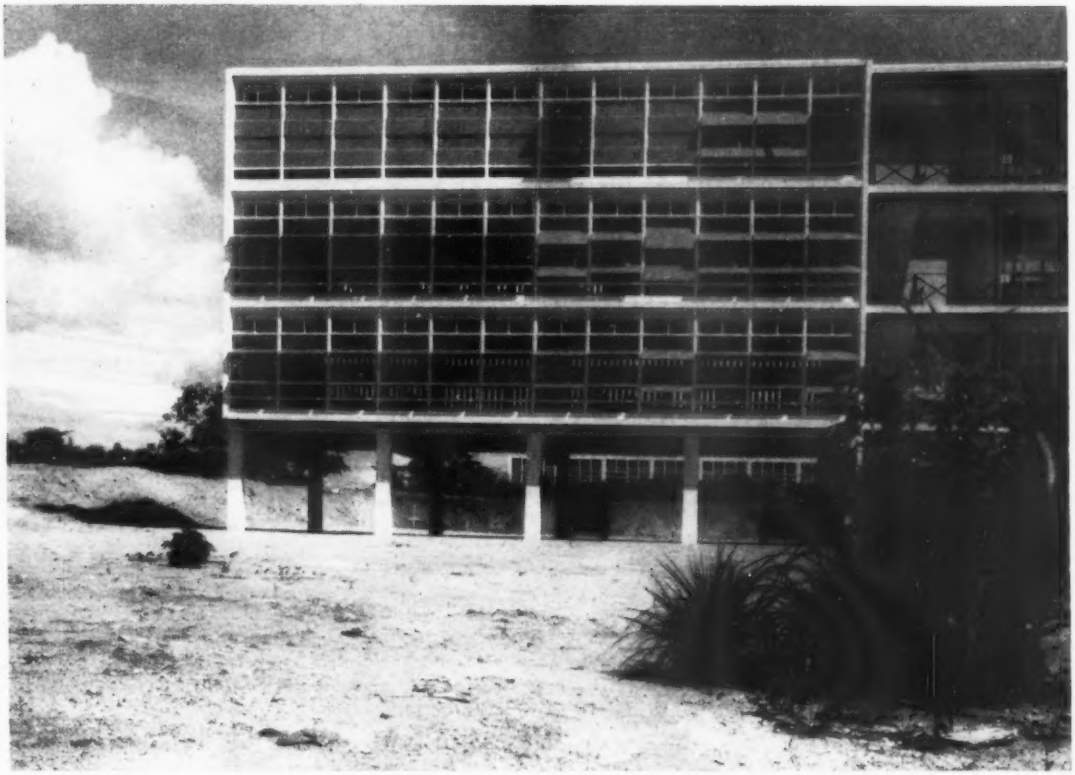
The most reliable fire cement is 'FEUSOL'. Have you tried it ?

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COLLEGE OF TECHNOLOGY, KUMASI: CLASSROOM BLOCK





windows glazed with non-actinic glass and movable through 135°. Below the clerestory are continuous rows of pressed steel doors containing glazed panels and openings of small adjustable louvres. The entire sides of the building can therefore be opened up to catch the breeze. Construction consists of a series of r.c. Y-shaped beams at 30-ft. centres, supported on single lines of columns. Between these beams are timber-trussed flat roofs suspended from the beams by steel rods. The two end bays have flat r.c. roof slabs to provide longitudinal

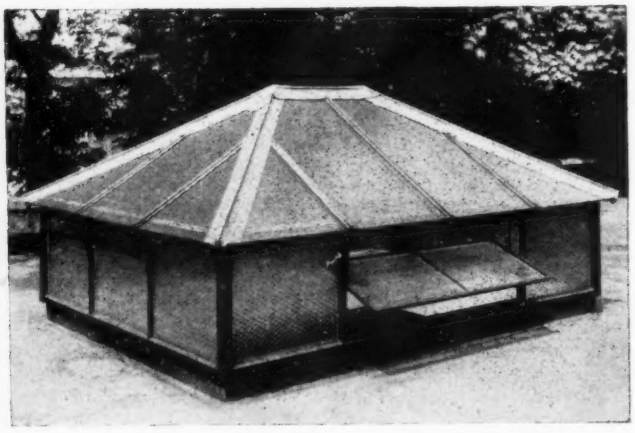
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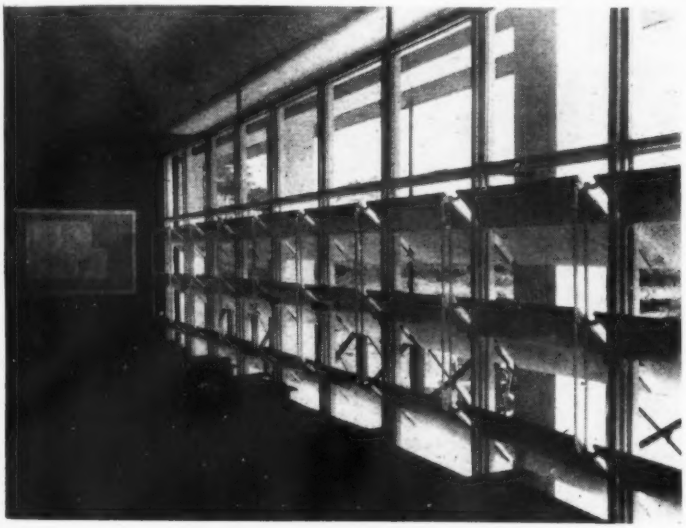
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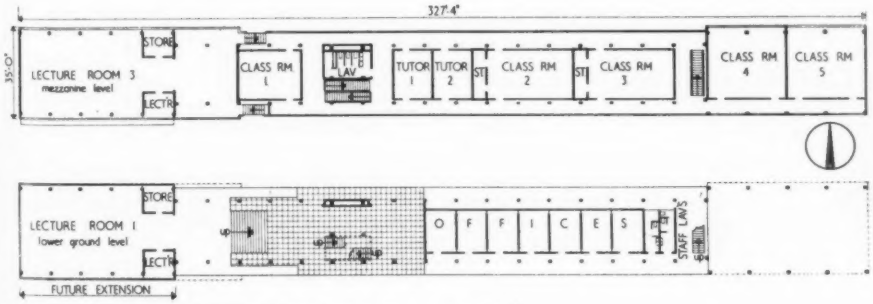
COLLEGE OF TECHNOLOGY, KUMASI: CLASSROOM BLOCK continued







stiffening. The timber trusses are lined with acoustic plaster board, backed by a layer of resin-impregnated glass fibre. On this and the previous page are views of the classroom block. Previous page, top, the west end of the block, which is to be extended later to provide a lecture room on each floor. The open area of the ground floor, below right, forms the main entrance and in the centre of the photograph is the service core containing lavatories, ducts and water tanks at roof level. On the south side of this "stack" are two staircases, designed "scissors" fashion. Page 194, bottom, the east end, also open at ground level, providing a covered car park. Above, left and right, are the open galleries which provide access to the centrally-placed classrooms and also act as sun-breaks. Left, one of the classrooms, showing an outer wall which largely consists of hand-operated metal louvres. The block has a r.c. frame and the galleries are cantilevered from perimeter beams. Walls are rendered and painted





Left: ground and typical upper floor plans [Scale: $\frac{1}{16}$" = 1' 0"]



The Mitre Hotel in the High Street, Oxford, was established over 600 years ago. Several of its rooms have fireplaces and panelling of the early XVIIth century. But The Mitre's standards of comfort are wholly presentday. It has an oil-fired heating system, which is supplied with fuel by Shell-Mex and B.P. Ltd.

A XIVth CENTURY INN WITH XXth CENTURY COMFORT

The Mitre Hotel in Oxford has oil-fired central heating

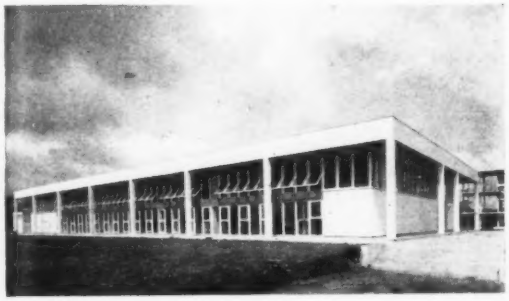
FOR SEVERAL centuries, The Mitre Hotel relied on open fires, warming-pans and frequent applications of hot punch in order to keep its guests warm. Today, The Mitre offers the best of both worlds. The old beams and panelling are still there to be admired—but wherever you go in the hotel you are sure of being comfortably warm whatever the fluctuations of the external temperature. The Mitre has an oil-fired central heating system.

One of the great things about oil-fired central heating is its flexibility. The temperature can be controlled closely, quickly and easily. If there is a sudden frost outside, the heating adjusts itself accordingly—and there are no hurried expeditions to the boiler-room to shovel and stoke. In fact, the system is the simplest thing in the world to operate and maintain. No dirt. No storage difficulties. And no supply problem.

This last is a most important point. Britain is already forced to import millions of tons of coal a year, and the difference between demand and available home supplies is likely to grow considerably. It has been reliably forecast that the country may be faced with an 'Energy Gap' of some 50 million tons coal equivalent by 1960. Realising the seriousness of this situation, many hotel proprietors as well as industrialists and private householders have changed their heating systems to oil-fuel. Would you like to know if your premises are suitable for an installation or conversion? Shell-Mex and B.P. Ltd. have had 40 years' experience in the economical applications of oil-fuel, and their knowledge and advice are at your service. Please write to Shell-Mex and B.P. Ltd., Fuel Oil Dept. 12G., Shell-Mex House, Strand, London, W.C.2.

COLLEGE OF TECHNOLOGY, KUMASI: PHARMACY BLOCK

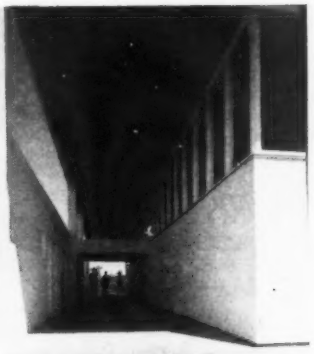
throughout. The pharmacy block, illustrated on this page, occupies a central position in the teaching area, south of the teaching block. Below,



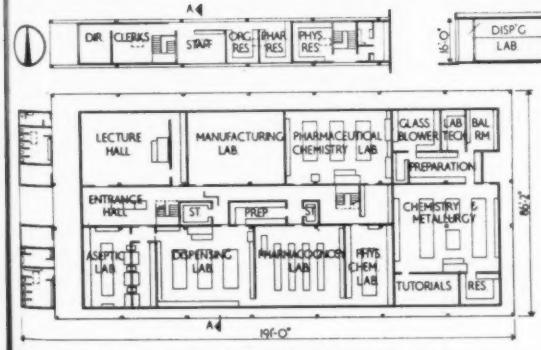


the south and east facades; right, part of the south elevation. Below, one of the laboratories; below, centre, the corridor between the main building and the lavatory blocks at the west end; below, right, the south-east corner of the building with the main classroom block in the background. The narrow mezzanine over the central corridor contains research laboratories and administrative offices; otherwise the building is single storey, with a floor to ceiling height of 16 ft. A continuous north to south internal wall divides the chemistry and metallurgical department from the rest of the block. Drainage of chemicals is in acid-resistant earthenware channels discharging into a neutralising chamber. The r.c. structure consists of columns of 25-ft. centres supporting deep transverse beams and forming a colonnade on three sides of the building. The lavatory blocks have external walls of load-bearing concrete blocks.

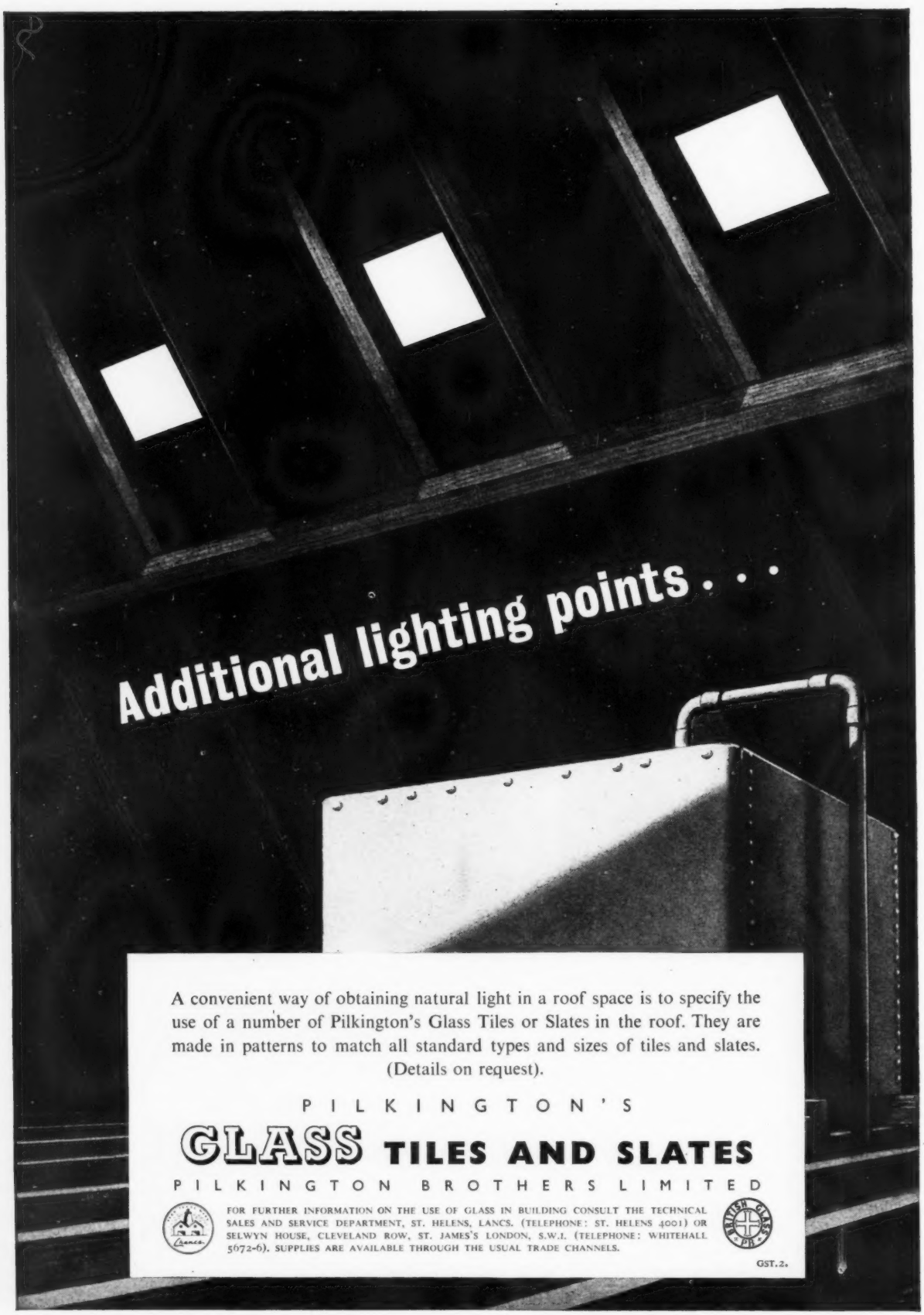








Ground floor and mezzanine plans and section A-A [Scale: 1/64" = 1' 0"]



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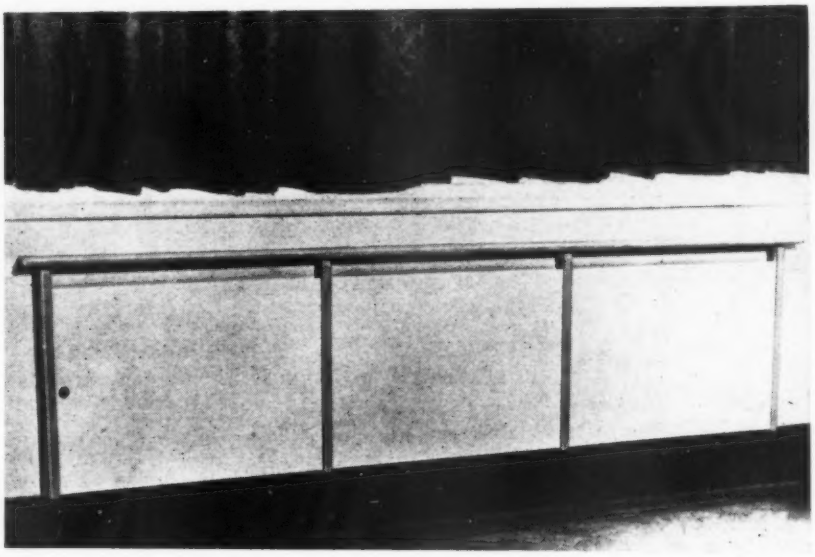
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GST.2.

technical section

THE INDUSTRY

This week Brian Grant reviews electric heating panels, a convector fire fitted with a boiler, dry rot treatment, pitch fibre pipes, an electrical convection heater and new types of galvanized steel roof decking.



Above: the Herga wall-mounted electric heating panels. Below: a new model in the Parkray convector fire range by Radiation Group Sales Ltd.



ELECTRIC HEATING SYSTEMS

The photograph on the right shows Herga electric heating panels which have now been modified to provide a wall-mounted heating system in which direct radiation is emitted from the front of the panels and convection currents from the rear are deflected forwards into the room by the shelf. Heating surfaces are non-metallic, the elements being embedded in a tough insulating plastic which is normally supplied in a natural mottled brown colour, but can be painted on the site with a heat-resisting paint. Walpamur has been found very suitable for this purpose. The panels can be fixed to the walls by grooved hardwood supports, cappings and deflector shelves, and any number of panels can be mounted edge to edge in a continuous run. Each panel measures 16 in. wide and 22 in. long and when mounted the height of the shelf may be either 18½ in. or 24½ in. above the level of the skirting boarding, this dimension depending on whether the panels are mounted with the long sides horizontal or vertical. Standard panels are rated at 350 watts and the price of a three-panel unit is £11 1s. 4d. including purchase tax, additional panels with the necessary supports costing £3 11s. 10d. Since the heat is dissipated over a comparatively large area, sharp local temperature rises are avoided and the system is very suitable for thermostatic control. The panels are guaranteed for five years. (*H. G. Poxon Engineering Ltd., 1-5, Northolt Road, Harrow, Middlesex.*)

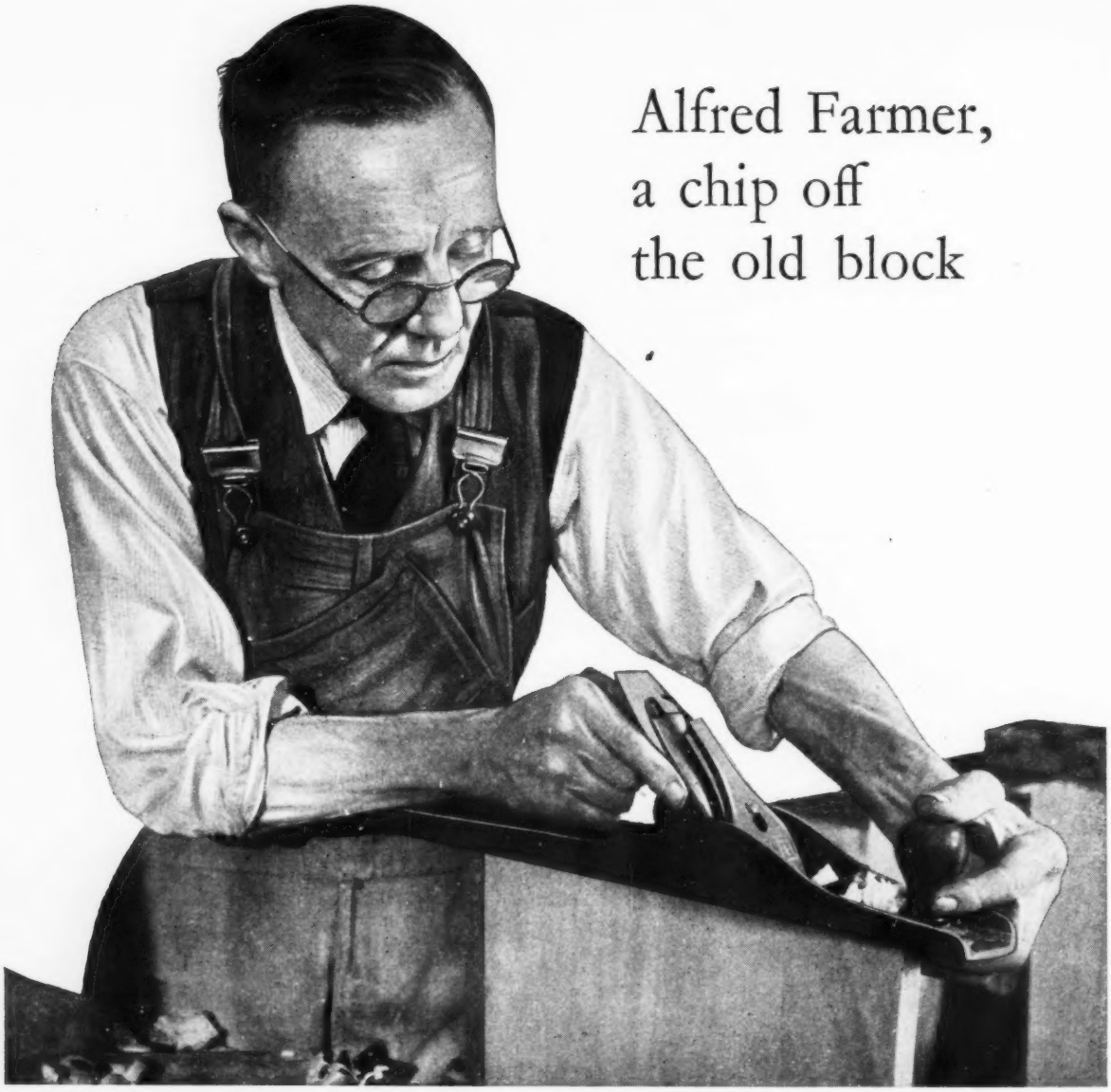
CONVECTOR FIRE AND BOILER

Radiation Ltd. have recently added a fourth model to their range of Parkray convector fires and this version is fitted with a boiler, which, in addition to providing domestic hot water, will also heat a radiating surface of up to 10 sq. ft.

The manufacturers claim an overall efficiency of approximately 47 per cent. on coal and 60 per cent. on coke, and this model is suitable for heating rooms up to 2,000 cubic ft. capacity if of traditional construction, or 2,700 cubic ft. if they are insulated to Egerton standards. The boiler rating is 10,000 B.t.u.'s per hour, but under slow burning conditions the rate is naturally smaller and falls to 1,500 B.t.u.'s per hour. The price, finished in various shades of porcelain enamel, is £22 15s. (*Radiation Group Sales Ltd., Park Foundry, Belper, Derbyshire.*)

DISCOURAGEMENT FOR DRY ROT

A new method of dry rot treatment has recently been developed by Protim Ltd., who make use of plugs which are solid sticks of fungicide and are intended to be inserted in holes drilled in the wall behind the skirting boards or near the ends of joists. In old walls, built without damp courses, the cost of inserting a new damp course is often prohibitive and it is quite common practice to inject considerable quantities of fungicide, and this liquid not only makes decoration difficult but is also liable to be diluted by rising moisture. With this newer method, the plugs remain solid until they are dissolved by rising damp and thus form a solution to protect the woodwork. (*Protim Ltd., 356-368, Evelyn Street, London, S.E.8.*)



Alfred Farmer, a chip off the old block

Even at the early age of fourteen Alfred Farmer had developed a love for fine woodwork. Doubtless he'd inherited it from his father, a successful cabinet maker. So keen was Alfred to carve a career in wood that, when his father insisted on his entering the insurance business, he ran away rather than forsake the work that gave him such a deep sense of pride and pleasure.

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technical section

BRITISH STANDARD FOR PITCH FIBRE PIPE

Drains and sewer pipes made from pitch impregnated fibre were first shown at the British Industries Fair in 1953 (they were discussed in the Technical section on March 10, 1955), and there is now a British Standard (No. 2760: 1956) which sets out the necessary methods of manufacture and the test requirements with which the pipes, couplings and fittings must comply. Pipes of this kind have been used in America for many years and the new standard is based substantially on American practice. These pipes have considerable advantages as they are extremely easy to join, resistant to vibration and at the same time are sufficiently flexible to absorb small earth movements and settlement. (*The Key Engineering Co. Ltd., Newgate Street, London, E.C.*1.)

CONVECTION HEATERS

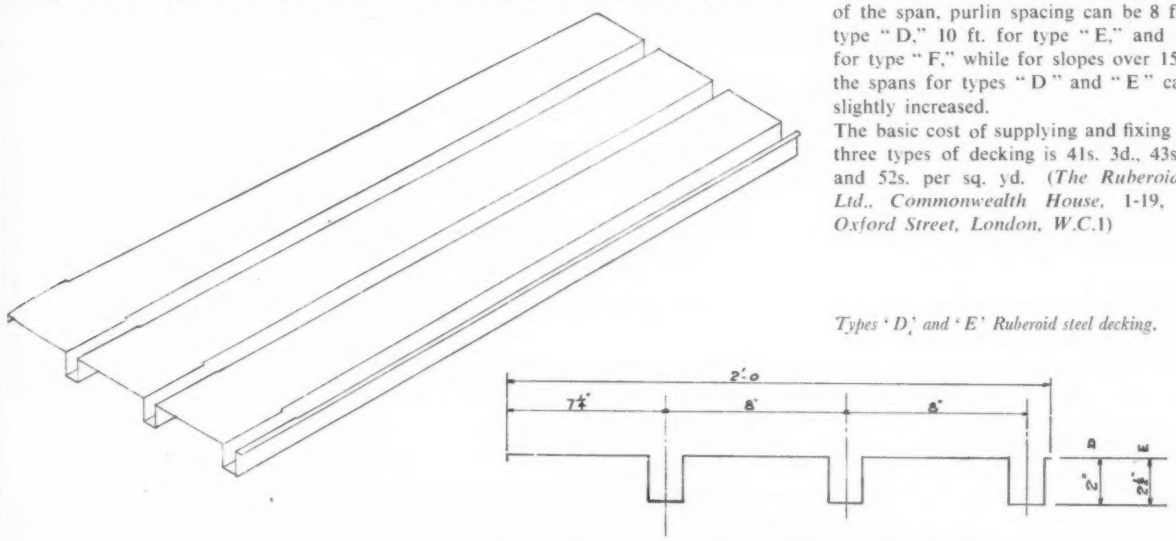
A new range of electrical convection heaters are being marketed under the trade name "Zephyr" by Belling. Both free standing and wall mounting types are produced and the standard finish is in bronze with a bronze front panel. Electrical loadings are 1, 2 or 3 kilowatts, and heat output is controlled either by an adjustable thermostat or a three-position switch giving either full, half or one-quarter of the standard output. Prices, including Purchase Tax, are £21 12s. 0d., £16 11s. 3d. and £10 10s. 3d.: thermostats on all types costing an extra 28s. 10d. (*Belling & Co. Ltd., Bridge Works, Enfield, Middlesex.*)

NEW STEEL ROOF DECKING

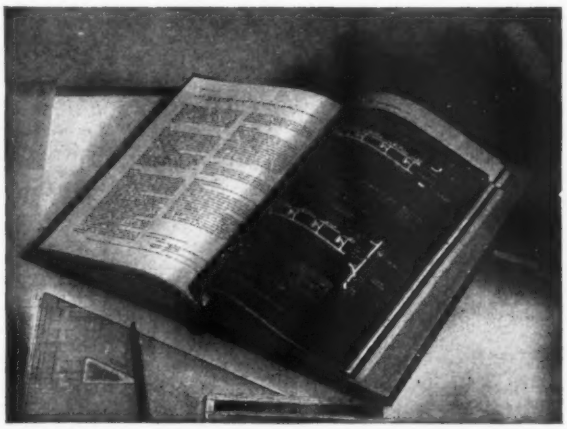
Three new types of galvanized steel roof decking have been added to the range produced by the Ruberoid Co. Ltd. The decking units are fixed to the purlins by hook bolts or special joggled cleats and insulation can be provided as necessary, using either fibre board or cork board applied over Ruberoid Vapour-seal, which is bonded to the deck in hot bitumen so as to protect the insulating material from internal humidity. For the final finish any of the Ruberoid standard weatherproofing materials can be used, although on sloping roofs it is usual to apply one layer of mineral surfaced roofing. Two layers of reinforced glass fibre base roofing are recommended on flat roofs. With half thickness of fibre board for insulation, this type of roof construction has an overall "U" factor of 0·37, variations in the roofing felt specification having very little effect on the figure.

Three types of decking are produced, type "D" having a depth of 2 in. and types "E" and "F" being 2½ in. deep. The decking units have an effective width of 2 ft. and are produced in lengths up to 12 ft., and stiffness is provided by cross-section corrugations running the length of the sheet. With a superimposed load of 30 lbs. per sq. ft. and a deflection of less than 1/250 of the span, purlin spacing can be 8 ft. for type "D," 10 ft. for type "E," and 12 ft. for type "F," while for slopes over 15 deg. the spans for types "D" and "E" can be slightly increased.

The basic cost of supplying and fixing these three types of decking is 41s. 3d., 43s. 6d., and 52s. per sq. yd. (*The Ruberoid Co. Ltd., Commonwealth House, 1-19, New Oxford Street, London, W.C.*1)



Types 'D' and 'E' Ruberoid steel decking.



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All Information Sheets published since the new series was started in October, 1947, have been reprinted. Specially-designed binding cases to hold approximately 100 Sheets may be obtained at the price of 6s. 0d. each. (Postage 6d.)

Individual Sheets may be ordered (3d. each). Readers requiring sets or individual Sheets should fill in the form below. Sets in classified order (without binders) are available as follows, and the publishers will quote for sets not detailed below.

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technical section

PLANNING REVIEW

recent planning history

We print this week the first of a new series of "planning reviews"—a series which will, we hope, keep our readers in touch with town and country planning matters. The reviews, which will be prepared by our Specialist Editor No. 7 (Planning), will cover both events and publications. This week we publish a review of two recent books—the latest report by the Bournville Village Trust and an American assessment of our New Towns.

On December 14 this year the Bournville Village Trust will have been operating for 56 years. With so many years of experience behind it, the views and comments of the Trust on matters relating to housing and planning should carry weight and might perhaps be expected to give at least a hint of the possible answers to some of the problems which are troubling us today. In the modest volume just issued,* however, the Trustees have confined themselves to a simple account of the activities and aims which they have pursued since their foundation without entering into too much technical detail.

When one considers the impact made by some of the Trust's earlier publications on the field of Town and Country Planning (When We Build Again, English County, and Conurbation) one's first reaction is disappointment, but on closer examination it is evident that this is too harsh a judgment, for the book is clearly designed to reach a wider circle of readers and is not really intended for the expert. Nevertheless the professional planner will find that it contains a great deal that is of interest and value.

In considering the relevance of the "Bournville experiment" to modern conditions it is important to recognize the special features which distinguish it from the kind of development with which most planners are familiar. The estate has grown up gradually over a considerable period and it has had the advantage of uniform control and direction by the Trustees during the whole of this time. Although the primary aim of the founder was to provide decent homes with gardens for working people at rents which they could afford, the position of the private trust has enabled them to carry out development by a variety of means. All this, together with the opportunity provided by an attractive site on the fringe of a great conurbation has made possible the evolution of a community with a varied social structure in a carefully-controlled environment. Given that these special conditions are unlikely to recur, what lessons can we learn from the success of this long-term social experiment?

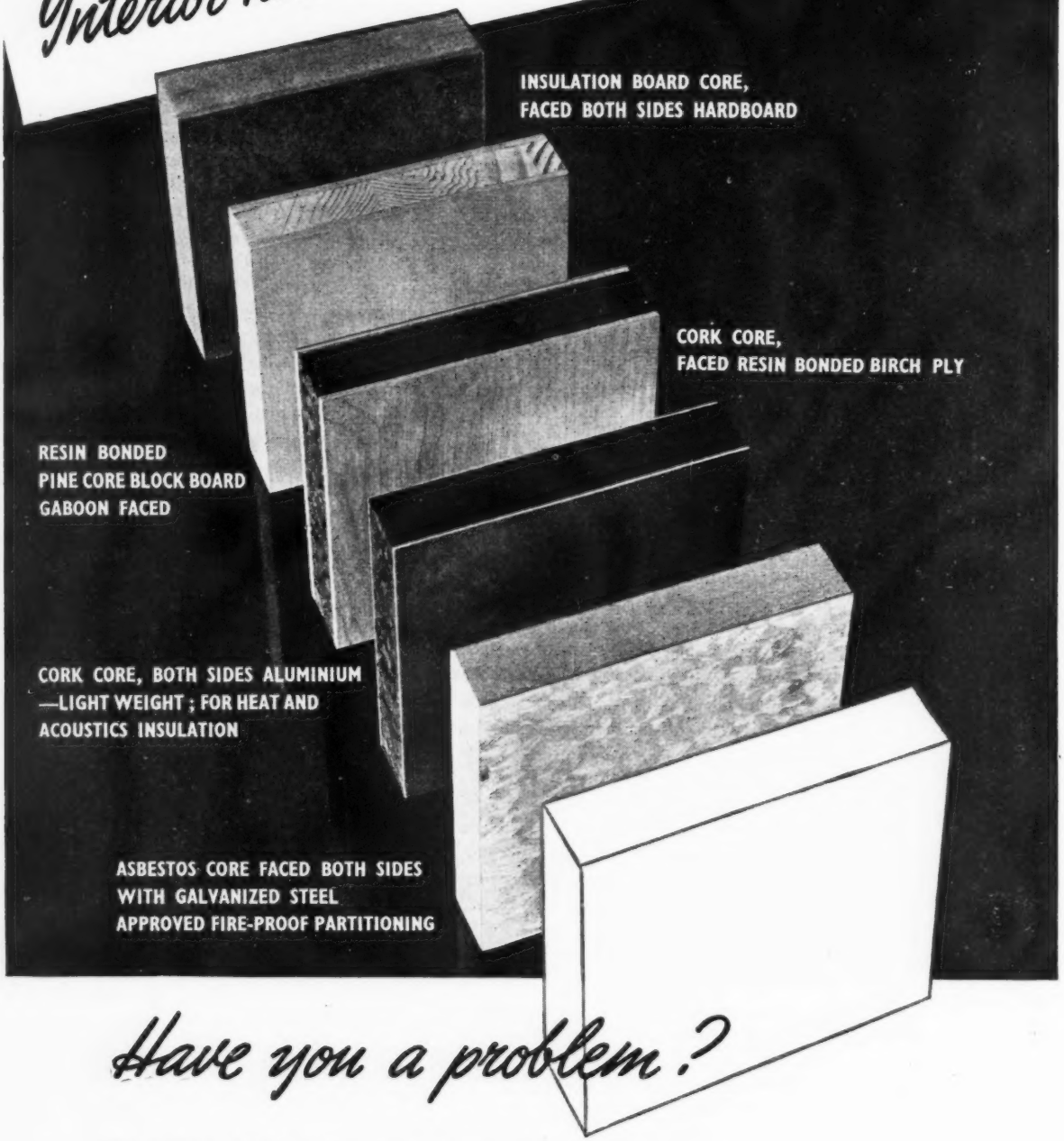
The first general point is in the design of the houses themselves. Most of the development at Bournville is in the form of small family houses with gardens. Soon after the experiments of the early years a "basic" plan was evolved which, with constant adaptations and improvements, still seems to satisfy most people's needs. The Trust's view is that, apart from the further refinements of internal arrangement, no general demand for fundamental alterations to this form are likely until the family is prepared to adopt new ways of living. They infer that such a change is not probable in the near future. It is difficult to accept this, for there are signs that a revolution in the way we use our homes may not be so far away. The high cost of fuel and the advent of the family car are two powerful factors that are operating now in this direction. We cannot afford to ignore them in house planning today, nor can the Trust if they intend to maintain their reputation as pioneers in this field.

Perhaps the most outstanding success at Bournville has been the merging of various strata of society to form a "community" conscious of its own identity. If we really believe that this is one of the things that planners ought to aim at, then much of their experience is of real value. From the account given it appears that the relatively slow growth, and the wide variety of agencies for carrying out the actual development—from direct labour to "self-build"—have contributed a great deal towards this, together with the high standard of maintenance over the estate as a whole which has succeeded in attracting and retaining the wealthier private developer. Very few of the residents have come in as a result of "slum clearance" schemes, so most of the difficulties this entails have been avoided. It is significant, too, that in the Trust's experience the most successful community developments have grown up informally in comparatively small units, rather than on a more ambitious scale in a single big "community centre." Residents' councils, for example, are based on a unit of not more than 600 houses. All this makes gloomy reading to the planner who is attempting to build up some kind of community sense in a vast overspill scheme where the houses are constructed at speed in large contracts (to save costs) and immediately filled with "slum clearance" tenants from a big city. His efforts are further frustrated by the almost negligible allowance for landscape work and the complete absence of community buildings—which, if and when they materialise, are usually envisaged as substantial units serving a fairly wide area. It would appear that the opportunity to develop anything beyond a one-class community will be confined to some of the more favoured new towns, where co-partnership housing development is perhaps a possibility.

The density of the Bournville estate is low, due largely to the stress that has always been laid on the "garden

* *Bournville Village Trust* 1900-1955. B.T.V. Publications. 12s. 6d.

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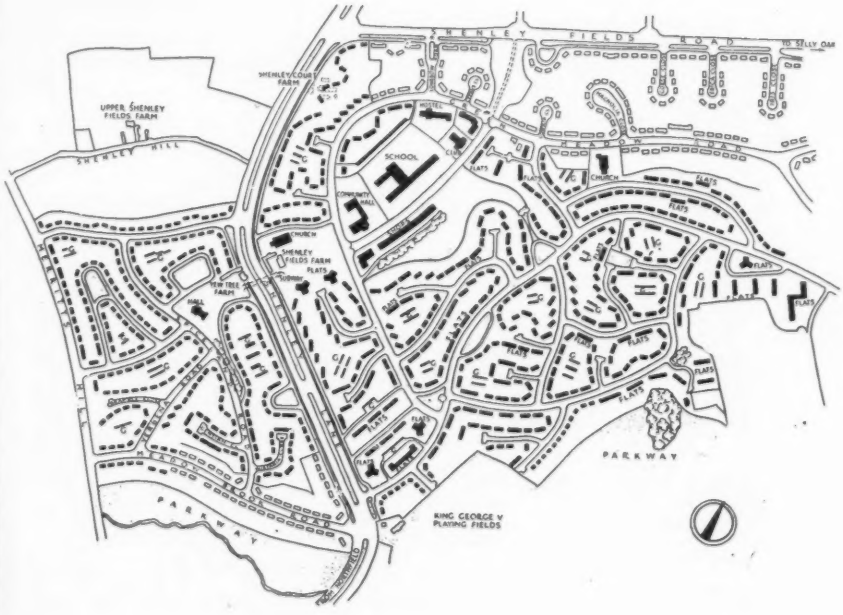
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technical section

suburb " type of development. Whatever its past merits, it is questionable if this type of development in its orginal form has any general application in modern Britain. Few if any contemporary planners now think in these terms. Bournville, too, has felt the effects of the national land shortage, for the local planning authority has required that all future development shall be at a density of 50 persons per acre net, and this has necessitated some radical re-thinking on the form of the next large-scale unit, the Shenley Fields Neighbourhood. It is evident that this change of policy has caused the Trustees some anxiety for they still maintain that, on social and practical grounds, the single family dwelling is the most satisfactory unit.

The revised layout which has replaced the more traditional original plan, is not yet in its final form. It is reassuring to learn that the Trustees intend to make changes, for as it stands the design is undistinguished compared with what has already been built on these lines in other places. (See illustrations below). Of the further points which emerge from the general account of the Trust's activities, their comments on development control are of special interest. They consider that the type of tenure adopted is of prime importance, and the advantages claimed for the system of leasehold now uniformly operated at Bournville are twofold. It provides a means of effective control after development has taken place and, where the area is of sufficient size, can be used as a safeguard for the maintenance of the amenity—and in consequence the value—of the estate as a whole. There seems little doubt that, given an enlightened landowner, control by this means can provide a far better effect than the occasional interventions of a local planning authority. Control of this type should be encouraged as a means of reinforcing the statutory system wherever possible. The sections on forestry and gardens are disappointingly thin considering the wealth of material that must have been available. There are some useful notes on the size of gardens, the preliminary work required to encourage continued interest by the tenant, and on the form and type of tree-planting adopted on the estate as a whole, but too little on the design and maintenance of the open spaces which are such a feature of Bournville.





Above left is the Shenley Fields Neighbourhood, Bournville, as originally planned. On the left is the plan for the same area as modified to meet the planning authorities' demand for a density of 50 persons to the acre. It will be noticed that the higher density requirement has not led to any fundamental change in principle governing the layout.

technical section

In general the historical sections of the book are well done, illustrated by some effective photographs and provide a useful, if popular, commentary for readers interested in the evolution of the garden suburb movement. Those on housing and planning seem a little less competent and, to the technical eye at least, the absence of scales from all the maps and diagrams is an irritating omission. In the remaining sections, apart from that on community life, the book tails off rather badly, and does less than justice, for example, to the Trust's valuable work in agriculture and research.

There is a note of uncertainty in the concluding section which is out of keeping with the record of achievement set out in the book. It is evident that the work of the Trust is now at a turning point. Many of the ideas which they pioneered are now accepted as orthodox planning theory, while others have lost some of their validity in the conditions we must work under today. The problems that planners and developers alike are faced with in a world of high costs, overall land shortage and rapid social change are different, but certainly no less urgent, than those which the Trustees set out so boldly to master over fifty years ago. New techniques and methods will have to be evolved. The "official" planner, pre-occupied with a mass of day-to-day problems involving "official policy" and hemmed in by restrictions of various kinds, is not able to contribute as much towards working them out as he would wish. The Trustees with their long experience and relative independence are in a much more fortunate position. The contribution they could make could be of immense value. There is certainly no lack of problems to be solved, and if the Trustees are prepared to meet this new challenge they can look forward to another fifty years of public service which will more than match the splendid record they have built up since their foundation. In this they can count on the support and good wishes of the whole planning profession.

AN AMERICAN ENQUIRY INTO THE NEW TOWNS

The British new towns have from their very beginning excited the interest of town planners all over the world. Indeed the pre-eminent position that Britain holds today in the planning field owes a great deal to the impact made by the boldness and enterprise of her new towns policy Any new project on this scale is sure to evoke criticism, and criticism there has been both here and abroad; but although the body of literature on the new towns is now considerable, there are as yet few serious, full-length studies of the programme as a whole. This may well be because most critics feel that in so short a time—a mere ten years—no such evaluation is possible, but a recent American publication by Dr. Lloyd Rodwin* makes a brave attempt at this most difficult task.

Dr. Rodwin, who is Associate Professor of Land Economics at the Massachusetts Institute of Technology, spent some time in this country studying the British planning system. He is a sensitive and shrewd observer and has examined a great mass of material. The extensive notes and references in his book would by themselves make his study valuable to any serious student of town planning. He set out, he tells us, to make "a case study of an important planning experiment" so as to find out "whether new towns make sense, taking into account the severest criticisms that can be levelled against them."

His criticisms are severe indeed, and, like the book itself, cover a very wide range. For Dr. Rodwin has by no means confined himself to the new towns in his survey. He reviews first of all the historical background to the new towns movement—and in particular the part played by Ebenezer Howard. He examines successively the policy and the legislation that brought the new towns into being; the technical and administrative problems of all kinds that arose during the construction of each individual town (including a long and painful account of the extraordinary difficulties at Stevenage and Peterlee) and discusses the implications of the further legislation embodied in the Town Development Act of 1952. Only after this extensive preparation does he attempt any assessment of the value of the new towns policy, for not until the final section does he set out in considerable detail his impressions of the effectiveness of the policy as a whole. On balance he considers it to be, at best, no more than a partial success, marred by a number of serious, fundamental errors.

It is difficult to summarize Dr. Rodwin's reasons for this evaluation without running the risk of misrepresentation. But in essence his argument appears to run thus. The new towns, and the new towns policy, cannot be said to have succeeded because the main objectives—curbing the growth and even reducing the size of London—have not been achieved. This is partly explained, he claims, by "naive expectations or radical defects in the approach," which can be traced back to basic errors in the ideas put forward by Ebenezer Howard himself. In his view both Howard and the new town pioneers failed to understand, ignored or misinterpreted many of the factors which combine to form the growing force and attracting power of a big city. In addition he thinks that they underestimated the financial and administrative difficulties involved in carrying out new town development. When the New Town Corporations attempted to carry the policy into effect, these basic weaknesses gave rise to a large number of serious difficulties—administrative, technical and financial—which were further exaggerated by the national economic crisis and the shortage of skilled personnel. By the time these obstacles had been overcome and the new towns had begun to take shape, it was evident that they were not going to alter the structure of the existing metropolis and were, in fact, no more than one other channel for a small portion of the outward flow of firms and families.

* *The British New Towns Policy, Problems and Implications.* Dr. Lloyd Rodwin : Harvard University Press. 60s. net.

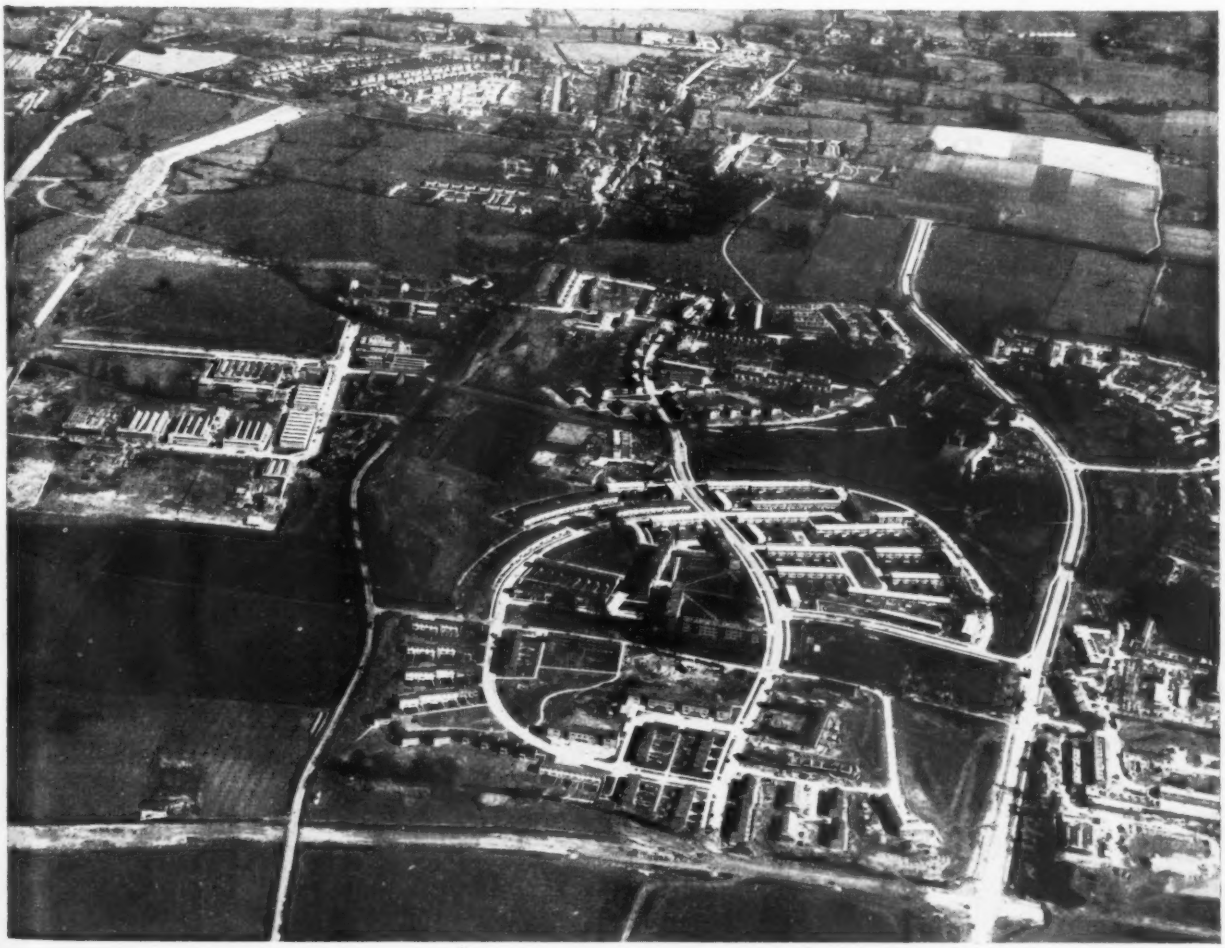
technical section

In spite of this failure to achieve the primary objective, Dr. Rodwin considers the new towns policy to be a great and important step forward, because of the large number of further developments that have arisen from it and the enlarged view that it gave of the nature of the planning process. The New Towns Act is cited as an example of this, and one which he believes to be full of promise, as it enables the local authorities to play an active part in town development policy. Another is the growing realisation of the vital need to co-ordinate all kinds of development from a number of fields in a more comprehensive regional plan and the urgent need for a better understanding of the process of urban growth. This in its turn has led to new conceptions of the kind of things a planner needs to know and the way he should be trained. Since Howard's original concept has had to be modified in the light of practice, Dr. Rodwin thinks that we are now able to see new towns in their proper perspective, as one of a number of possible means of effecting planned development, and not as the panacea for metropolitan congestion. At Peterlee and Corby, for example, they have already proved their worth under different conditions and for a different purpose. Although he admits that town building by a public corporation has proved to be a feasible proposition, he maintains that as yet it is a very imperfect instrument. The difficulties involved, he considers, are too great to admit of a repetition elsewhere—either in Britain or abroad—of this method in its original form.

What weight ought to be attached to these views and how far do they reflect a true assessment of the contribution that the new town policy and the new towns themselves have made towards the theory and practice of town planning? On the whole it would be fair to say that Dr. Rodwin, in spite of all his efforts to be objective, has given a one-sided view of their practical achievements. He has seriously misjudged the motives and the practical ability of Howard and the garden city pioneers and the authors of the New Towns Act. He dwells at too great a length on the difficulties that beset the corporations during their early years, without giving any parallel account of their solid achievements in the face of them. In spite of the care that has been taken over the "potted histories" of the individual towns, errors of fact and interpretation are bound to occur. This section is certainly the weakest in the book and will probably prejudice many of his readers.

Housing at Harlow New Town. The celebrated ten-storey point block known as "the Lawn" can be seen right centre in the middle distance.

Photograph by Aerofilms



technical section

This will be a pity, for in spite of its faults Dr. Rodwin's book is an important one which may be influential on both sides of the Atlantic. It should be studied by all those who are likely to be concerned with new town development, since it is an interesting example of the reactions of an astute and shrewd observer of our efforts over the past ten years. Dr. Rodwin is to some extent a victim of his own expectations. He came, hoping to find in the British new towns policy the answer to many of the problems of urban development which plague planners all over the western world. He was disappointed to find that, although it has carried us several stages further on in our knowledge of theory and practice, it is by no means the final answer, and he is at pains to point this out, together with the vast range of important questions which so far remain unanswered and even unexplored.

So far as planners in this country are concerned he is preaching to the converted. No one today looks upon new towns as the final solution to metropolitan problems. We are well aware of the urgent need for regional planning and a proper programme of basic research. Some of us have been pressing for both these things for a long time and we are glad to have Dr. Rodwin's support in the campaign. Indeed, one of the most useful features of the book is the delineation of key fields in which further work is badly needed. The optimum size for cities, the most effective form of regional urban network, questions relating to density of development in central areas and the use of the concept of "accessibility" as a means of assessing the relationship between various activities in urban areas are quoted as examples of the kind of investigations which he considers ought to be given high priority in the light of our present ignorance.

Some readers will consider the work as a whole to be an outright attack on new towns and the new town policy and may feel that Dr. Rodwin has done a disservice by providing free ammunition to the opponents of all large scale planning projects. This view is mistaken. The success of the new towns—particularly on the financial side—is now sufficiently well established for them to withstand even Dr. Rodwin's criticisms and still come out on the credit side. We now know that new towns can be built successfully by public corporations and that they will work. Although we know, too, that they are only one kind of solution that the planner can provide to urban problems, it is quite clear that we need more of them in addition to the "expanded" towns if our decentralisation programme is to become effective. This book shows how many mistakes were made when the projects were first begun and how many of them could have been anticipated or avoided altogether. It does not prove that the new town policy was, or is, a failure. When the next batch of new towns gets under way we can learn something from Dr. Rodwin's criticisms. When they are established we ought then to ask him to come again. He will not be so disappointed a second time.

Photograph by Aerofilms



Housing at Crawley New Town.

building illustrated

SECONDARY SCHOOL

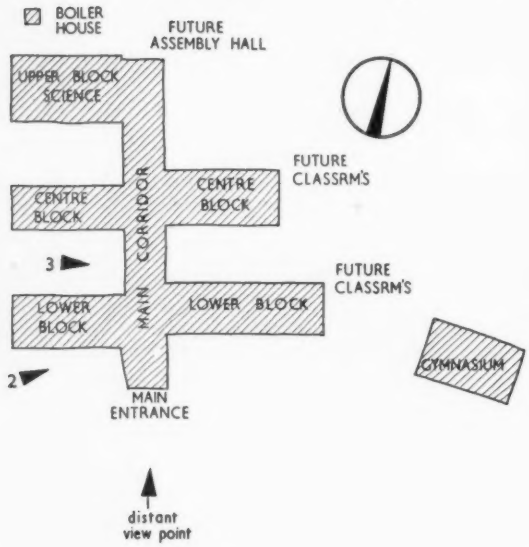
at MÖRBY, STOCKSUND, SWEDEN, designed by CARL NYRÉN; quantity surveyor EINAR BOREGÅRD

This co-educational school for 500 pupils between the ages of 11 and 16 has been built on a country site near Stockholm. The designer, a young Swedish architect, was the winner of a competition organised by the state-controlled schools' board. The accommodation provided includes ordinary classrooms, domestic science and art rooms, chemistry, physics and biology laboratories, workshops, staff rooms, kitchens, dining rooms and an assembly hall with stage and projection room. The assembly hall, and four classrooms to the east were not built when the photographs were taken.

Viewpoint 1, from the south-east.



building illustrated



Key plan showing photographic viewpoints



Right (viewpoint 2): the west wing is the lowest of the three blocks, from the west. This block contains common rooms, staff rooms and dining halls. In the centre is the main entrance and in the background the free-standing gymnasium block. Below (viewpoint 3): the courtyard formed by the north facade of the lower block (right), the south facade of the centre block (left) and the main corridor, which links all three blocks (centre). External walls are mainly finished with fair-faced brickwork and roofs have a low pitch to retain snow.



building illustrated



Right: a view of the main spine corridor. The floor finish is marble, the balustrading is of travertine, and the ceiling is of natural timber boarding. In a less severe climate this circulation could be a simple covered way. Below: this classroom shows the simple construction of brick walls and piers, and reinforced concrete beams. Internal finishes are for the most part the natural materials. The main lighting from the south is supplemented by clerestory lighting and a reflecting north wall. Artificial lighting is provided by fluorescent tubes fixed behind grilles in the ceiling.



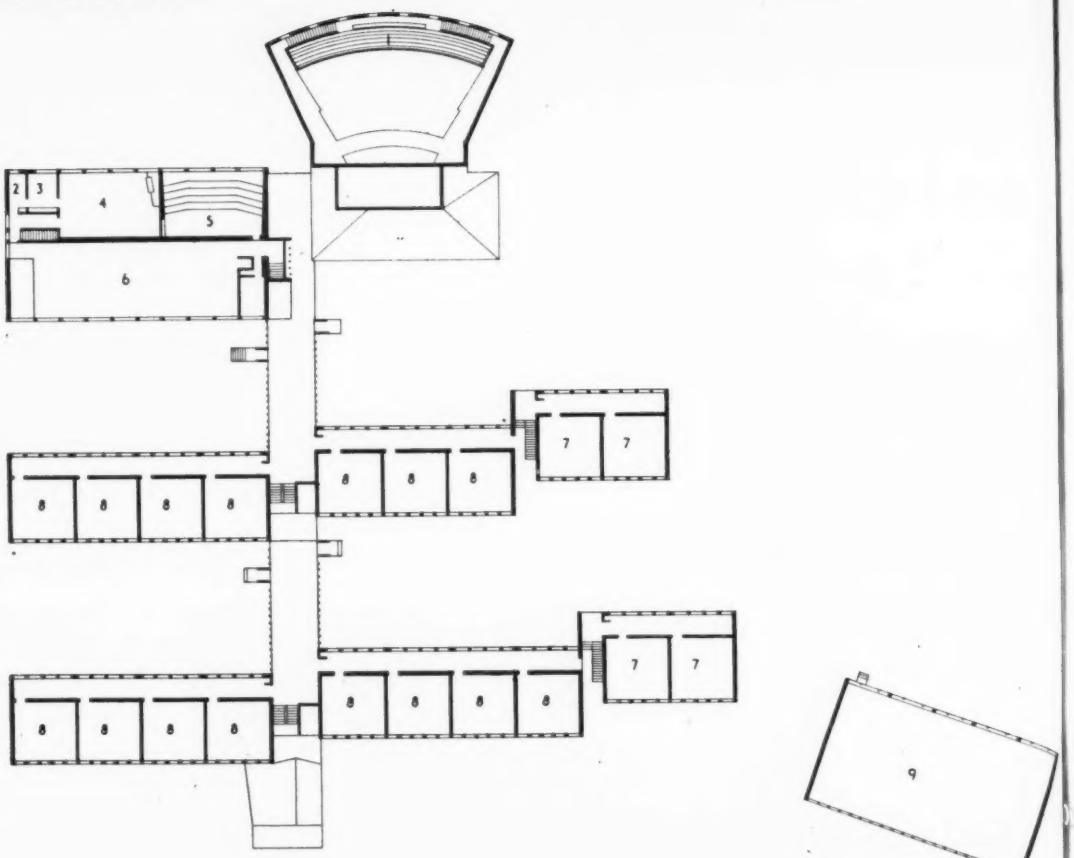
SECONDARY SCHOOL

at MÖRBY, SWEDEN

designed by CARL NYRÉN

Key to first floor plan

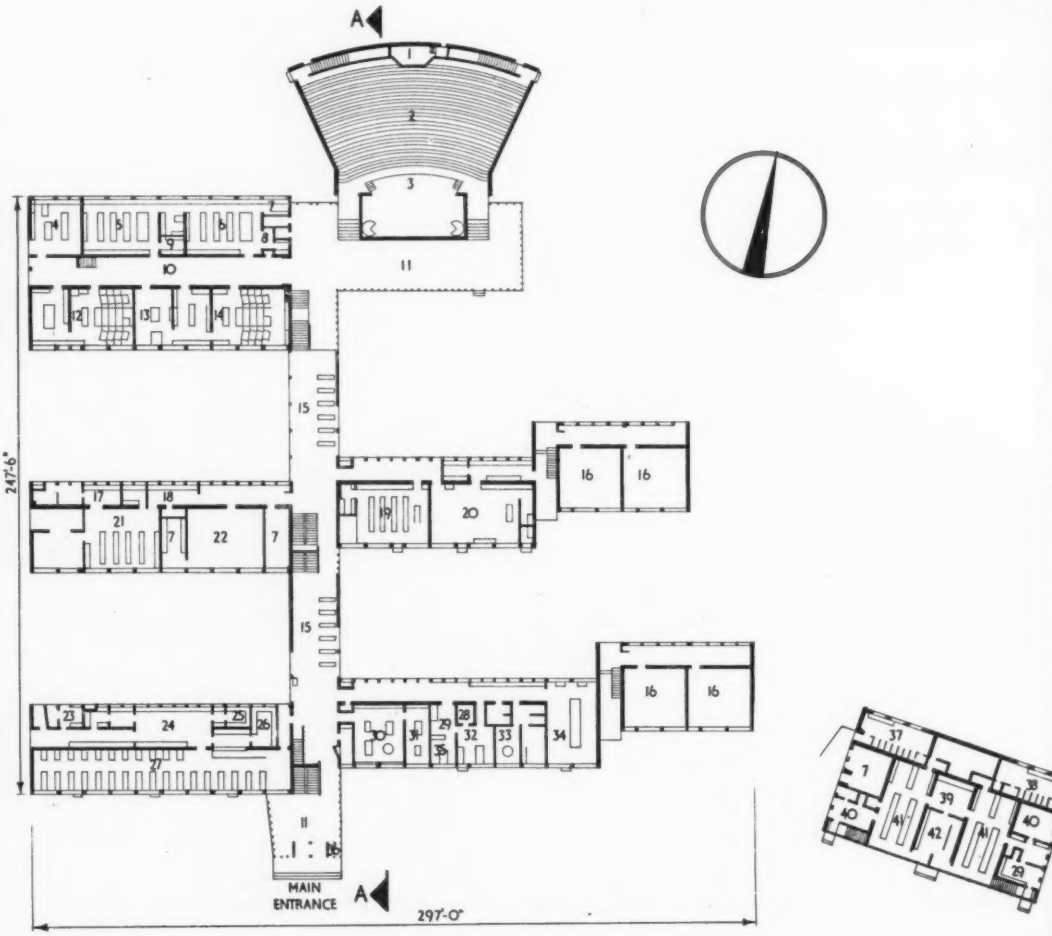
1. gallery
2. teacher
3. modelling room
4. art room
5. music room
6. writing room
7. future classroom
8. classroom
9. gymnasium



First floor plan

Key to ground floor plan

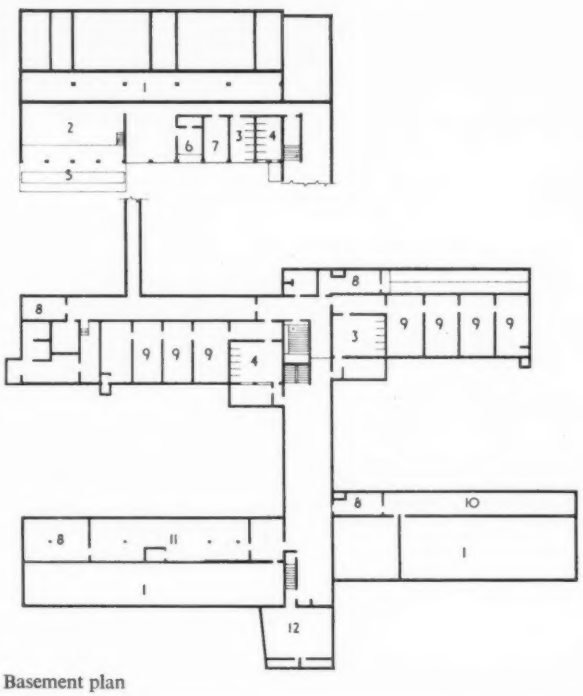
1. projection room
2. auditorium
3. stage
4. biology lab.
5. chemistry lab.
6. physics lab.
7. store
8. motor generator
9. fume cupboard
10. corridor
11. foyer
12. biology lecture room
13. map room
14. lecture hall—physics and geography
15. cloaks
16. future c assrooms
17. laundry
18. changing rooms
19. metal workshop
20. woodwork shop
21. domestic science
22. craft room
23. staff cloaks
24. kitchen
25. larder
26. scullery
27. dining room
28. archives
29. waiting room
30. library
31. study
32. headmaster
33. study
34. staff room
35. secretary
36. porter
37. boys lavatories
38. girls lavatories
39. drying rooms
40. doctor
41. boys changing room
42. girls changing room



Ground floor plan

[Scale: $\frac{1}{64}$" = 1' 0"]

building illustrated



Basement plan

Key to Basement

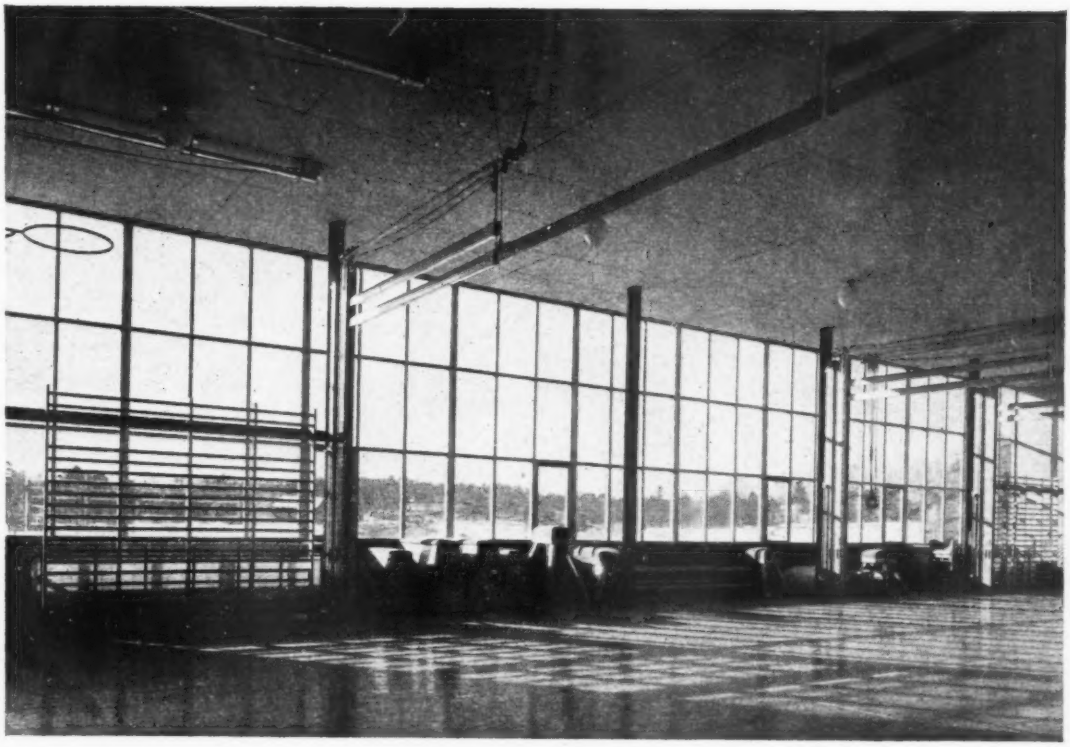
1. Excavation
2. Boiler house
3. Girls' toilets
4. Boys' toilets
5. Oil tanks
6. Workshop
7. Fan room
8. Drying room
9. Air raid shelter
10. Culvert
11. Sub-station
12. Store

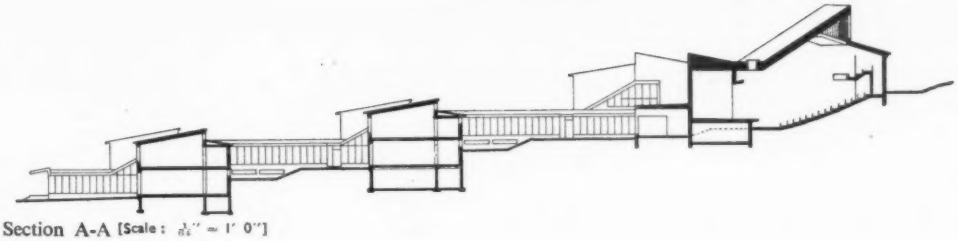
SECONDARY SCHOOL

at MÖRBY, SWEDEN

designed by CARL NYRÉN

Below: the gymnasium is at first-floor level, with natural lighting from the south. Beneath it changing rooms and lavatories open directly on to the playing ground.





Section A-A [Scale: $\frac{1}{16}$" = 1' 0"]

building illustrated

SECONDARY SCHOOL

at MÖRBY, SWEDEN

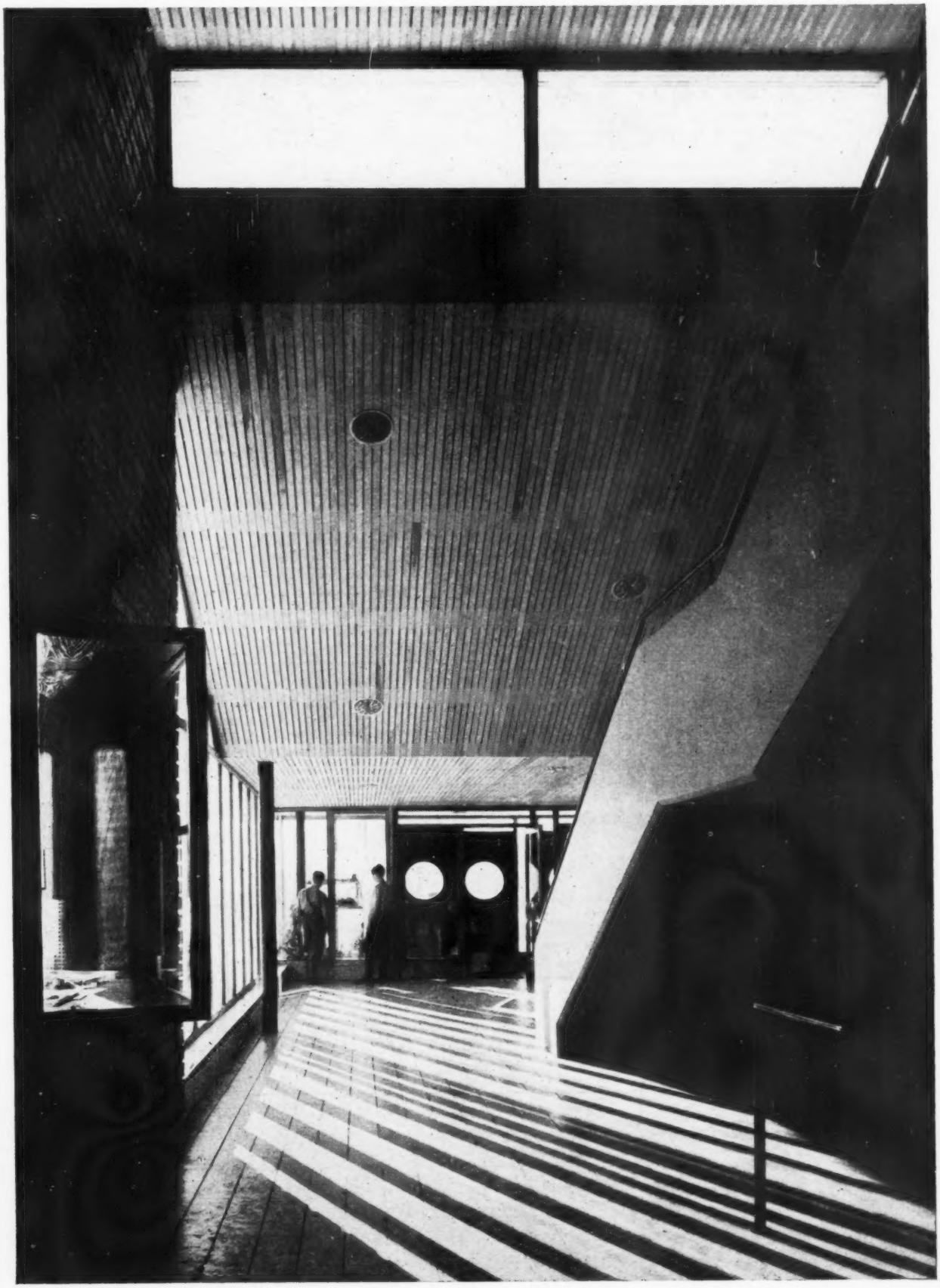
designed by CARL NYRÉN



Above right: the woodwork room shows the simple use of natural wood and brick finishes. The floor finish is wood. The lighting is fluorescent. Below: staff common rooms and dining rooms, together with administrative offices, occupy the lowest wing, and have direct access to the drive and the playing fields. The windows are double glazed. The lights are tungsten. Opposite page: the main entrance from the inside. This is at the lower end of the central corridor that runs northwards up the hill. This area has simple finishes in brick, travertine, marble, concrete and wood.



building illustrated



analysis

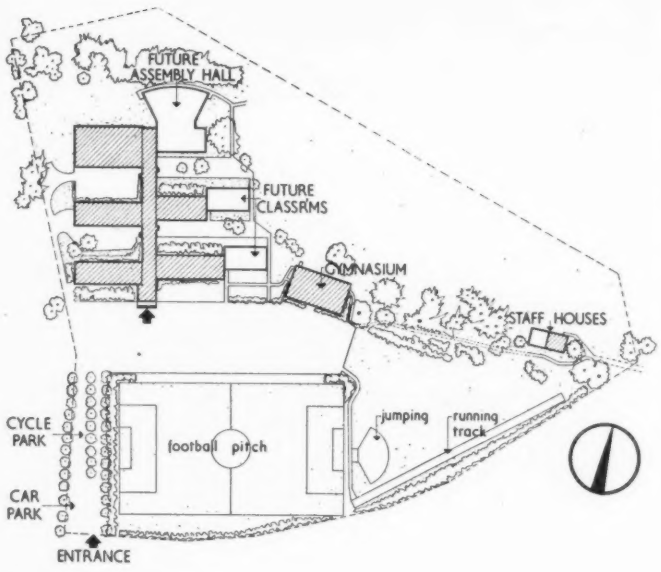
SECONDARY SCHOOL

at MÖRBY, SWEDEN

designed by CARL NYRÉN

CLIENT'S BRIEF: his stated requirements

Schools are state-run in Sweden, and so the client is really the government: but areas and districts make their own plans within the overall national policy. A competition for the design of the school was organised by the state at the national level, to try to provide comprehensive school accommodation on the site. They envisaged a large number of uses, including secondary schooling, commercial schools teaching technical subjects to older students and some teachers' homes. These ideas were given as suggestions to the competitors, who were then invited to show how they would develop the site. The competitors were not bound to actual accommodation requirements but were asked to give an architectural appreciation of the use of site. The winning design shows only one type of school and only four teachers or caretakers' houses: and so it is clear that architectural considerations for the site development came above other purely economic considerations.



Site plan

SITE: topography, surroundings, access, planting

A hillside falls towards low-lying meadow ground. Surroundings include villa residences and meadows. The road between Stockholm to Marrtalje and Djarshoha is lined with pine and deciduous trees.

PLAN: general appreciation and relation of units

The buildings are sited on the hillside, parallel to the contours, so that the foundations rest on rock and the lower ground is left free for a play area and sports ground. The parallel classroom blocks are connected by a glazed corridor which, in a country with a less severe climate, could take the form of a covered way. The buildings are designed so that the first floor of the centre block is level with the hillside above.

The main school has one long spine corridor, and this opens on to the classroom wings, administration blocks and the assembly hall. The boiler house is placed to the north west of the school; the laboratories, domestic science blocks and kitchens are all to the west of the main corridor, and the service access to the building is on the west side. The gymnasium ,with lockers, changing rooms and showers underneath, is separate from the main building, near to the sports ground. The four houses are at the end of the site furthest from the main entrance.

MAIN CONSTRUCTION: general appreciation

Load-bearing brick walls and piers carrying r.c. lintols and beams. R.S. stanchions are used in the gymasium block.

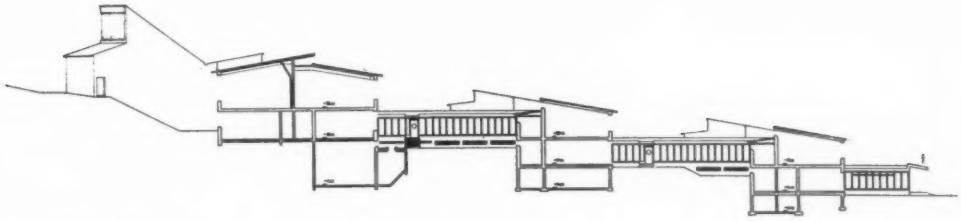
STRUCTURAL ELEMENTS

Work below ground floor level: foundation type	*Location*	*Materials*	*Finish*	*Reasons and comments*
Concrete on rock	Throughout	Rock		

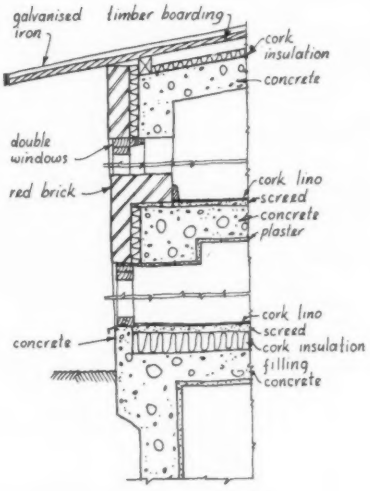
External walls and facings	*Location*	*Materials*	*Finish*	*Reasons and comments*
13½-in. brick load bearing walls	Outer walls of all wings	Brick	Fair faced	

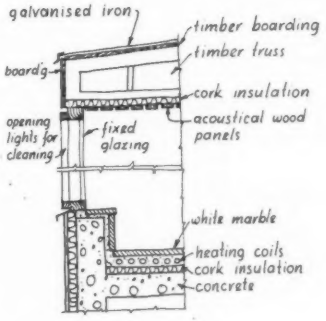
Frame or load bearing element	*Location*	*Materials*	*Beam spans*	*Column grid*	*Reasons and comments*
R.C. beams span between external walls for floors and roof			25 ft.	c. to c. of beams 15 ft.	Simplest and cheapest form of construction for two-storey buildings
R.S. stanchions used in gymnasium block along outer walls only, with R.S. beams			35 ft.	c. to c. columns about 18 to 20 ft.	

analysis



Longtitudinal section on north-south axis [Scale: $\frac{1}{8}$" = 1' 0"]





Above: sketch section, main corridor external wall.

Left: sketch section, typical external wall

Roof type	*Location*	*Material*	*Finish*
Low pitch	Throughout	Galvanised iron on timber boarding and cork thermal insulation on r.c.	Galvanised iron

Floor structure type	*Location*	*Material*	*Finish*
Concrete	Throughout manual training rooms and main corridor	Reinforced concrete	Velvet cork-lino. Oak block over floor heating panels

PARTITIONING

Internal partitions	*Location*	*Material*	*Finish*
Brick and lightweight concrete	Classroom blocks	Fairfaced brick with raked joint	Brickwork washed by pressurised steam. Concrete blocks plastered

FINISHINGS

Ceiling finishes	*Location*	*Materials*	*Finish*	*Reasons and comments*
Flat	Ground floor	Concrete	Plaster	
Sloping	First floor	Concrete	Timber boarding on	
Flat	Corridor	Timber	acoustic insulation	

SERVICES

Electrical installation: source and type of fitting	*Location*	*Materials*	*Finish*	*Reasons and comments*
Normal type of A.C. lighting—not fluorescent				

Boiler type and capacity	*Heat load*	*Fuel type*	*Stoking method*	*Reasons and comments*
Oil fired thermostatically controlled boiler		Oil, but can be adapted for solid fuel	Automatic	Cost and maintenance. Adaptable for wood in case of war

analysis

Water heater type	*Location*	*Materials*	*Finish*	*Reasons and comments*
Hot water insulation to radiators	Throughout			

Hot water storage	*Location*	*Materials*	*Capacity*	*Reasons and comments*
Cylinders	Near toilets and kitchen	Copper		

Pipes and jointing types	*Location*	*Materials*	*Electric installation method*
Copper with screwed joints	Throughout		

Cold water storage	*Location*	*Materials*	*Capacity*	*Reasons and comments*
Tanks	Under roofs	Galvanized iron		

THERMAL INSULATION

Type	*Location*	*Materials*	*U-value*	*Reasons and comments*
Cork insulation	In roof			Winter covering of snow provides additional insulation

SPECIAL ACOUSTICAL TREATMENT

Sound absorption material	*Location*	*Absorption coefficient*	*Reasons and comments*
Back wall in all classrooms is of cavity brickwork			

FIRE

Planning precautions, access for fighting

Each corridor has a 30-m. hose and a dry riser for fire fighting

Means of escape

Numerous external doors on ground floor

TIME SCHEDULE

Drawings for competition	October, 1951 (started)
Work commissioned in	May, 1952
Contract signed	January, 1953
Work commenced	May, 1953
Work stopped	December, 1954

Comments

Main buildings are not yet complete. Work stopped on these in September, 1954, so that school could be used. Gymnasium finished in December, 1954

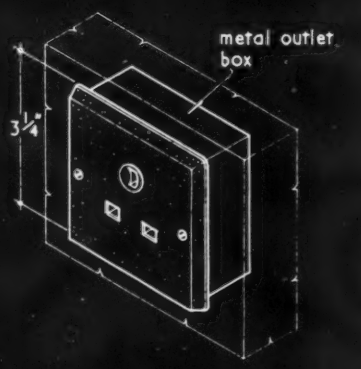
SITE AND PLAN ANALYSIS

Site accommodation	*Area in acres*	*Per cent. of total*
Building	0·6	7·5
Playing fields	1·9	23
Hard playing areas	0·9	11·5
School garden	0·12	1·5
Planting near building	0·25	3·0
Roads	0·12	1·5
Paths paving	0·05	0·6
Caretaker	0·05	0·6
Wooded part of site	4·0	50·8
Total	8·0	100·0

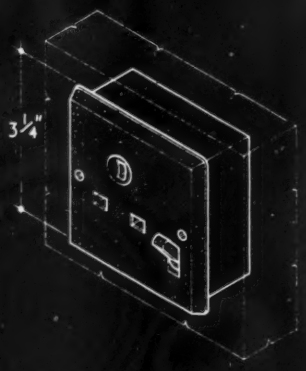
Plan accommodation	*Area in sq. ft.*	*Area per place*
Hall (examination)	2,782	5·4
Stage	214	0·4
Gymnasium	4,210	8·5
Library	700	1·4
Store	1,000	2·0
General and practical classrooms	9,100	18·7
Dining	1,600	3·2
Pupils storage	2,780	5·4
Sanitary accommodation	1,870	3·7
Staff rooms	2,000	5·0
Service	1,280	2·9
Circulation	4,260	8·2

Number of places	500
Floor area (sq. ft.)	56,000
Number of sq. ft. per place	112

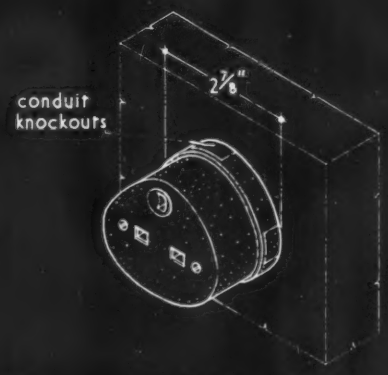
Note: it is not possible to include details of cost for this school at present, but it is hoped to publish these later



flush socket outlet no. 4431

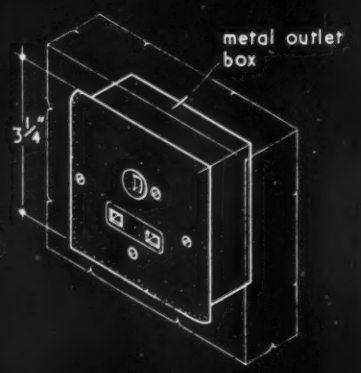


flush switch socket outlet no. 4527

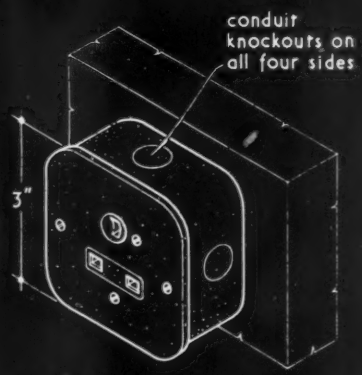


surface socket outlet no. 4523

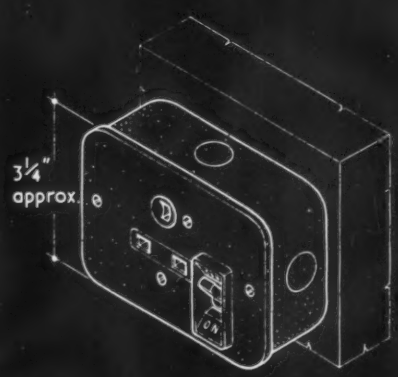
13AMP. 3-PIN SHUTTERED SOCKET OUTLETS.



flush socket outlet no. 4435

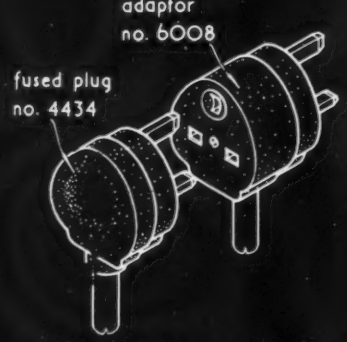


surface socket outlet no. 4442



surface socket outlet no. 4531

13AMP. 3-PIN METAL-CLAD SHUTTERED SOCKET OUTLETS.



FUSED PLUG AND ADAPTOR.

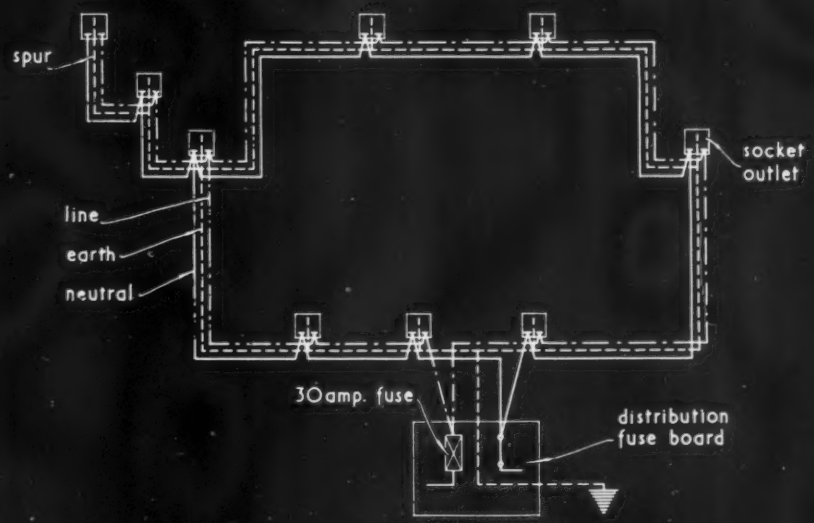


DIAGRAM OF TYPICAL RING MAIN CIRCUIT.

·EDISWAN· SHUTTERED SOCKET OUTLETS. Manufacturer: The Edison Swan Electric Company Ltd.

37.C2 ·EDISWAN· SHUTTERED SOCKET OUTLETS

This Sheet illustrates types of socket with insulated or metal front plates, and metalclad sockets. It also describes ring main circuits with which the sockets can be used.

Socket Outlets

The 13-amp. 3-pin shuttered socket outlets, fused plug and adaptor illustrated conform to BS. 1363 where applicable. The insulated types are available in brown or ivory white, and the metal front plate type is finished in B.M.A. or chromium. The metal-clad socket outlets are housed in pressed steel boxes finished in aluminium stove-enamel. Ample wiring space is provided and there are knock-outs for ¾-in. conduit.

Fused plugs: The fuse can be replaced without dismantling the plug.

Fused adaptors: The adaptor combines the functions of plug and adaptor. The fuse in the adaptor limits the total load on the socket outlet in to which it is plugged.

Ring Main Circuit

The ring main circuit is being adopted more and more for domestic installations, since it allows a large number of socket outlets to be installed at a comparatively low cost. Large economies can be made in the use of cable, fittings and labour as compared with the old method of wiring each 15-amp. socket outlet back to its own fuse on the distribution board. Each plug can be fused at a rating to suit the appliance to which it is connected and is completely interchangeable throughout the installation. As each plug is independently fused, no inconvenience is caused by having to switch off the ring circuit if a fault occurs in any particular appliance.

Circuit: Conductors must not be less than 7/0·029 in. (or equivalent cross-section) and must be installed as a loop starting from, and returning to, the same terminals on the main fuse, the rating of which must not exceed 30 amp. The loop is carried around the house through the rooms where socket outlets are required.

Number of socket outlets: The latest edition (13th) of the I.E.E. Regulations for the Electrical Equipment of Buildings permits an unlimited number of 13-amp. socket outlets to be installed on a ring circuit provided the floor area does not exceed 1,000 sq. ft. If the area is greater than 1,000 sq. ft. the number of socket outlets on any one ring circuit is limited to 10 (including spurs).

Post War Building Studies No. 11 (H.M.S.O.) recommends that the minimum number of outlets to be installed in small houses or flats should be:

Living room	3
Double bedroom	2
Single bedroom	2
Kitchen	2 (or 3 where intended for use as a living room)

The normal small house (up to 1,000 sq. ft.) therefore can be wired with socket outlets on only one ring circuit.

Spurs: Socket outlets which cannot conveniently be connected on the ring circuit may be fed from spurs using 7/0·029 in. cable as on the ring and either one or two sockets may be connected on any one spur. The total number of sockets connected by spurs must not exceed the total number of the ring circuit itself.

Other Circuits

The use of 13-amp. socket outlets is not restricted to ring main circuits. The table below shows other economical wiring systems utilising 13-amp. socket outlets and fused plugs.

Special conditions	Minimum size of stranded current-carrying conductor used throughout		Minimum size of alternative current-carrying conductor: mineral-insulated cable used throughout (in.²)	Maximum permissible number of socket outlets and fixed appliances (other than electric clocks fed through fused clock connector)	Maximum rating of fuse(s) or half maximum rating of instantaneous overload circuit-breaker, protecting the final sub-circuit (amp.)
	Cross-sectional area (in.²)	Number and diameter (in.) of wires			
—	0·0045	7/0·029	0·003	2	20
All outlets in one room (not a kitchen) of less than 200 ft.² floor area in a house or flat	0·0045	7/0·029	0·003	3	20
—	0·007	7/0·036	0·0045	6	30
Ring circuit and spurs, if any, in industrial or other premises ..	0·0045	7/0·029	0·003	10	30
Ring circuit and spurs, if any, in house or flat, on the basis of one ring circuit for every 1,000 ft.² of floor area or part thereof (provided the socket outlets are reasonably distributed among the ring circuits when there are more than one) ..	0·0045	7/0·029	0·003	unlimited number	30

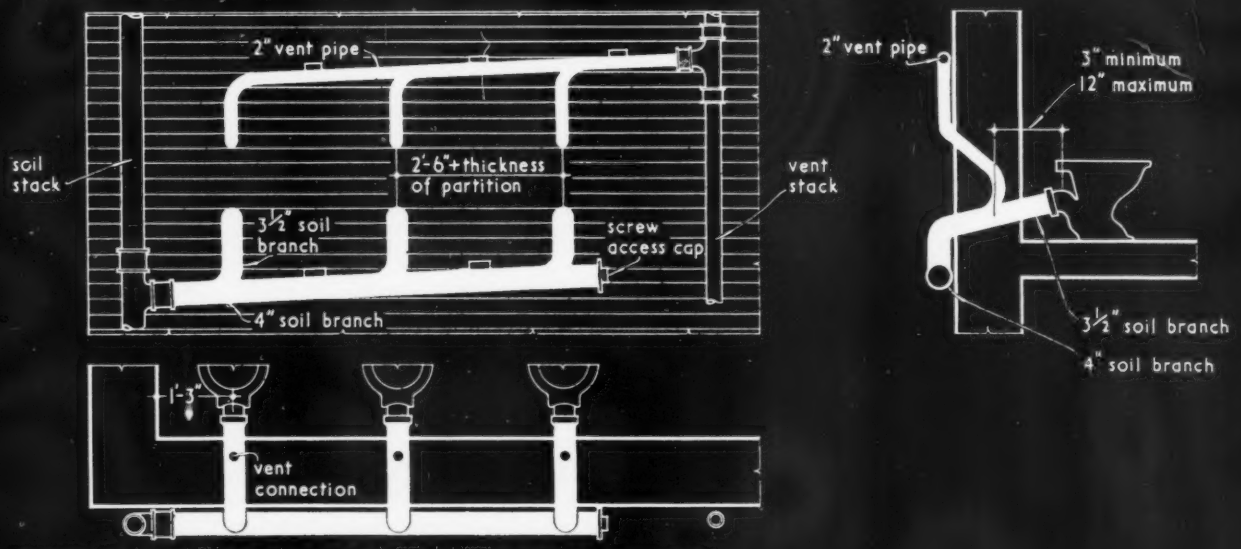
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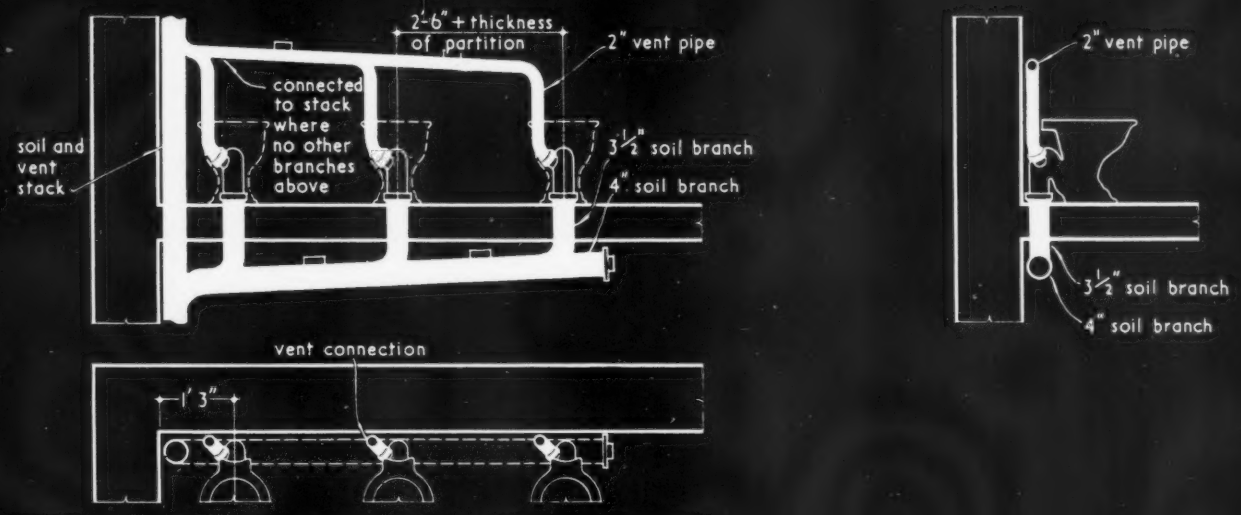
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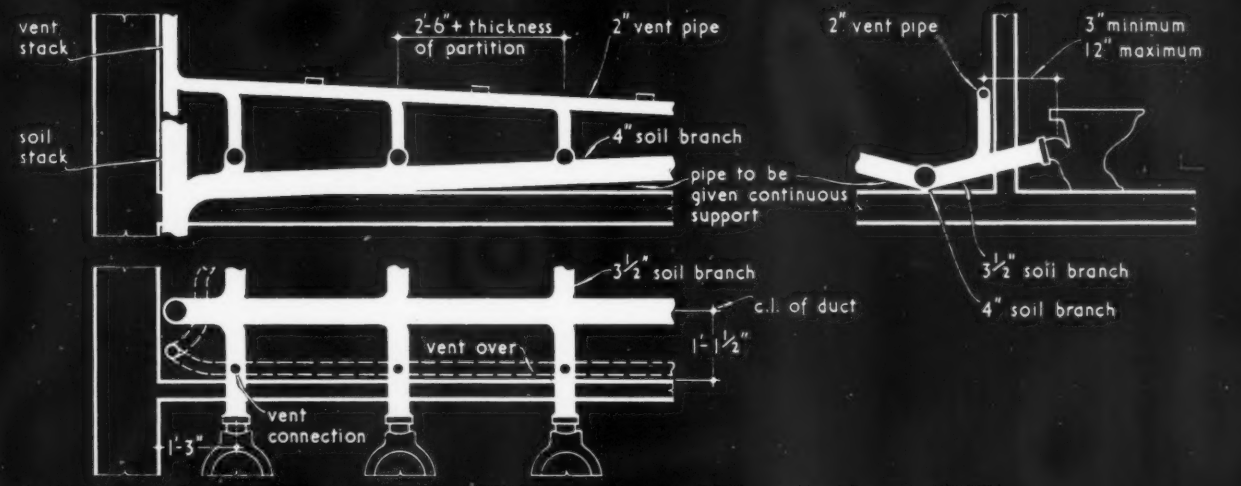
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RANGE OF W.C'S ALONG EXTERNAL WALL - EXTERNAL PIPEWORK.



RANGE OF W.C'S ALONG EXTERNAL WALL - INTERNAL PIPEWORK.



RANGE OF W.C'S AT RIGHT ANGLES TO EXTERNAL WALL - INTERNAL PIPEWORK IN DUCT.

LEAD PLUMBING TO RANGES OF W.C'S. Compiled from information supplied The Lead Sheet and Pipe Council

33.C2 LEAD PLUMBING TO RANGES OF W.C'S

This Sheet supersedes Sheet 33.C2, published 6.5.48, and sets out the general principles of lead plumbing to ranges of w.c's. Typical ceramic w.c's have been shown but minor variations may be made to the plumbing for other types of w.c.

Design Notes

The following notes include recommendations based on the appropriate British Standards Specifications, the Institute of Plumbers Minimum Specification, Model Bye-laws, etc.

Compartments: W.c. compartments are generally 2 ft. 6 in. wide.

Outlets: These are commonly 3½ in. internal diameter.

Traps: These are either the P or S type and integral with the appliance. (See B.S. 1213 : 1945.)

Branch soil pipes: The internal diameter of the branch soil pipe connecting the appliance to the soil stack should not be less than the internal diameter of the outlet to the pan, *i.e.*, commonly 3½ in. internal diameter. Branch connections should be given a slight bend in the direction of the flow. Branches serving a number of appliances should be 4 in. internal diameter; soil stacks are usually 4 in. internal diameter. (There is no accepted guide except the requirements of Local Authorities.)

Soil stacks: These should be carried above the highest branch (to act as a ventilation pipe) to a minimum of 2 ft. above the level of the top of any window within a distance of 15 ft. from the open end of the pipe.

Vent or anti-syphon pipe: When two or more appliances are connected to the same pipe the trap of each appliance must be ventilated. The vent or anti-syphon pipe (minimum internal diameter 2 in.) should be connected to the trap or soil pipe branch at a point 3 in. minimum and 12 in. maximum from the crown of the trap. The vent pipe should terminate in the open air similarly to the soil stack or be connected to the soil stack 3 ft. above the highest branch.

Falls and rises: Falls in soil pipe branches and rises in vent pipe branches should be ¼ in. in 1 ft. minimum.

Access: All pipework should be readily accessible.

Range of W.c's along External Wall—External Pipework

The drawing shows a commonly used arrangement where all pipework is external. P-trap w.c's allow the most straightforward work since the pipework need pass through the wall only, and not the floor. Lead branches should be used between the appliances and the stacks as the flexibility of the material prevents strain on the appliance during and after fitting.

Range of W.c's along External Wall—Internal Pipework

The arrangement shown is often used where ranges of w.c's are one above the other on successive floors, for example in office buildings. S-trap appliances with an integral vent outlet are used with the main soil branch immediately below the floor. The vent pipes are connected direct to the vent outlet of the appliance. The lead soil and vent stacks, together with all other pipework, are confined to the inside of the building.

Range of W.c's at Right Angles to External Wall—Internal Pipework in Duct

This is an arrangement which may be specially suitable for schools and buildings where two ranges of w.c's can be sited back to back. The duct can accommodate all pipework—disposal plumbing, cold water distributing pipes and flushing cisterns. Access to the duct must, of course, be provided, As with the first arrangement P-trap w.c's permit the most straightforward work.

Sizes and Weights of Pipes

The weights of lead pipe should be as given in B.S. 602 : 1956 *Lead Pipes for other than Chemical Purposes* i.e. soil branches and stacks—3 in. by 15 lb. per yd., 3½ in. by 17 lb. per yd., 4 in. by 19 lb. per yd; Vent pipes—2 in. by 10 lb. per yd.

Further Information

The Lead Sheet and Pipe Council maintains a Technical Information Bureau which is available to answer questions and advise on technical problems dealing with this subject generally.

Compiled from information supplied by:

The Lead Sheet and Pipe Council.

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working detail

HOISTING PLATFORM: FARM AT MINETY, WILTSHIRE

Stillman and Eastwick-Field, architects

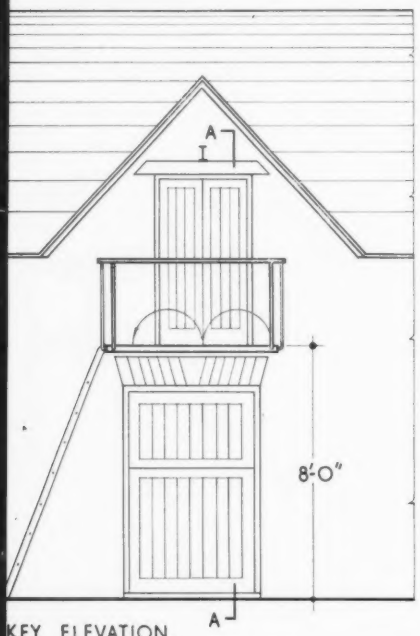


The platform is designed with a two-leafed trapdoor which is pierced by a hole in the centre where the leaves meet. The pulley ropes from the gantry above pass through this hole. Sacks raised by the pulley open the trapdoor as they rise above the platform level. As soon as they are clear the two leaves fall back into place so that the sack can be deposited on the platform. The platform is made of oak and the leaves are provided with rubber pads to deaden the sound when they flap back into place. The hinges are flush with the top surface of the platform.

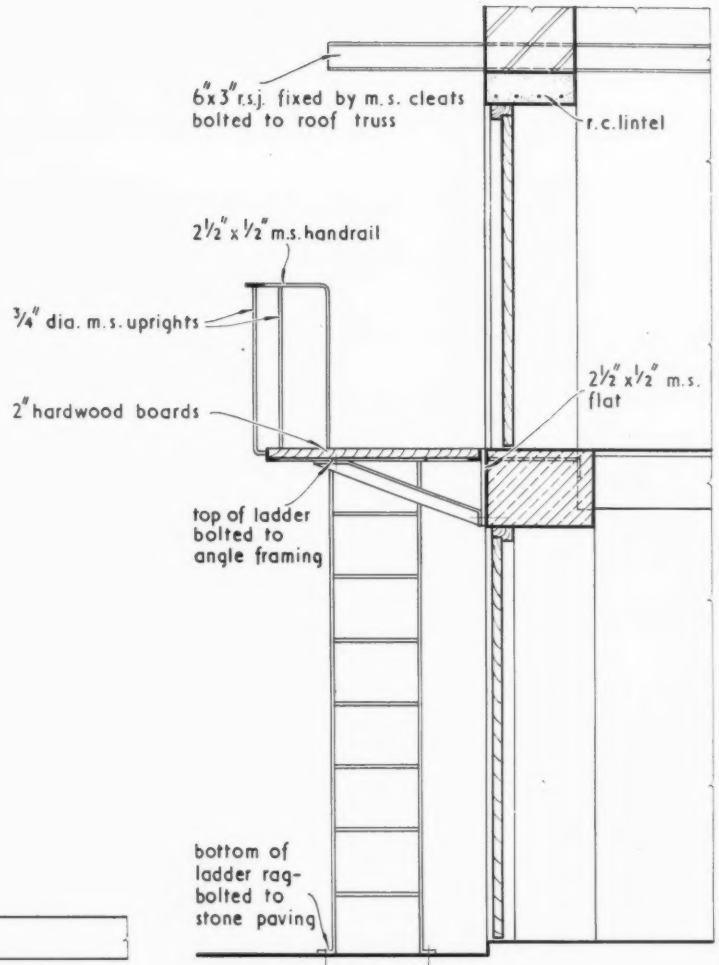
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HOISTING PLATFORM: FARM AT MINETY, WILTSHIRE

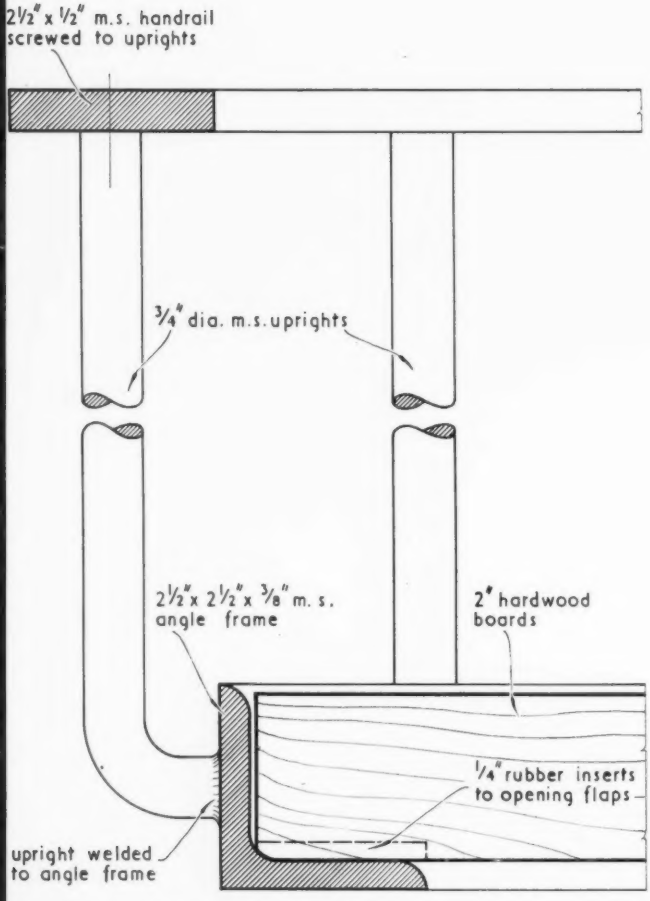
Stillman and Eastwick-Field, architects



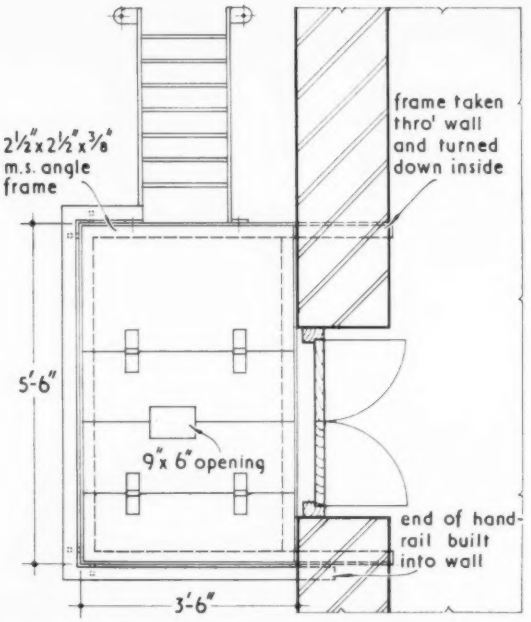
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SECTION A - A. scale ⅜" = 1'-0"



DETAIL OF HANDRAIL. scale ½ full size



PLAN OF PLATFORM. scale ⅜" = 1'-0"



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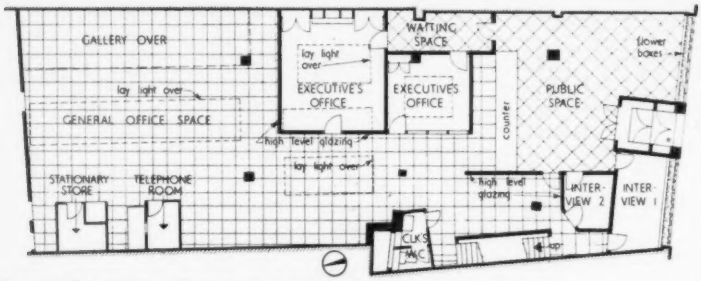
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OFFICES FOR BUILDING SOCIETIES continued

photograph above left on the previous page is of the public enquiry counter behind which is the general office space and executives' rooms. The internal partition, extreme left in this photograph, which contains special sound insulation and lighting was illustrated as a working detail in the JOURNAL *for December 22, 1955. Top right on the same page is the waiting space outside the executive offices. On the left is the facade to High Holborn: the fascia is of travertine in a single panel, carrying polished bronze lettering containing neon tubes internally. Under the window sills are grilles to allow fresh air to reach the indoor plants, which form a permanent decoration. The general contractors were William Mason & Son Ltd. Above: offices in Birmingham for the Birmingham Citizens Permanent Building Society, designed by John H. D. Madin.*





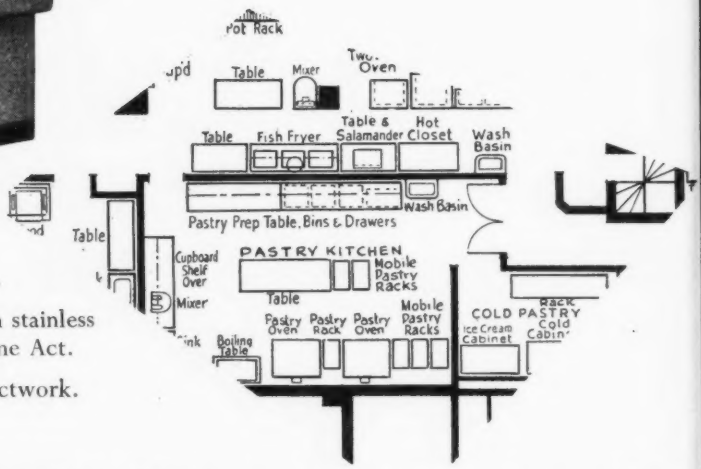


Ground floor plan, offices in High Holborn [Scale: $\frac{1}{2^{4}}$" = 1' 0"]

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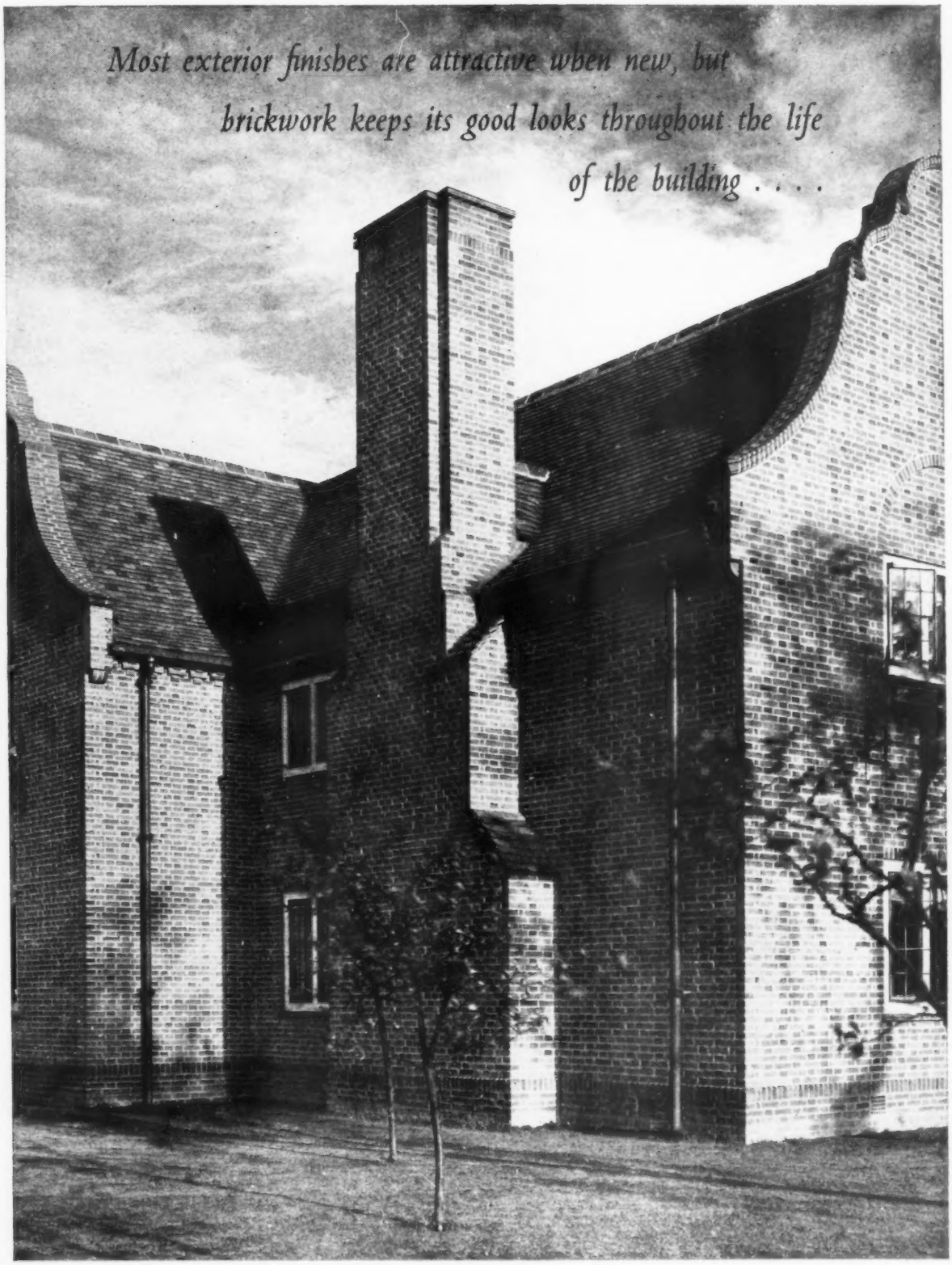
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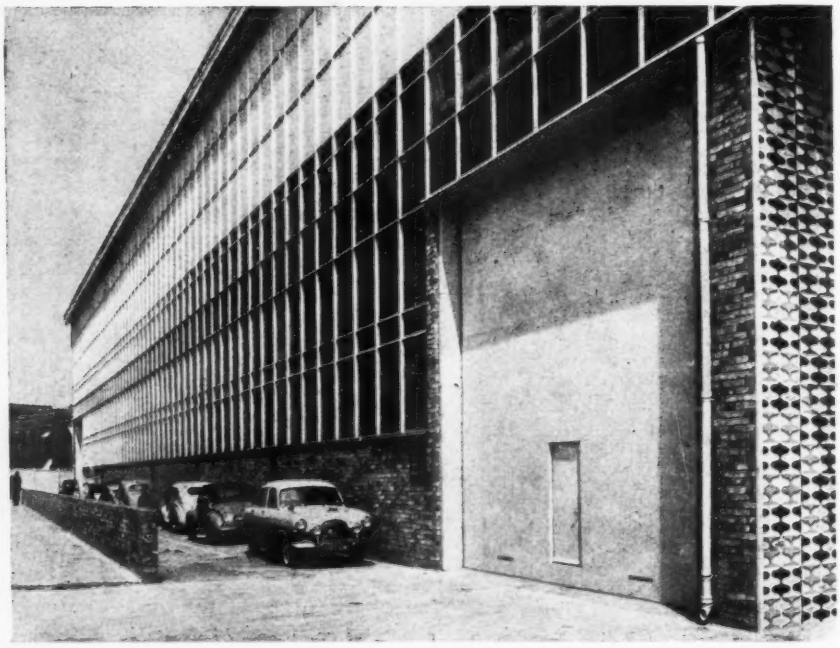
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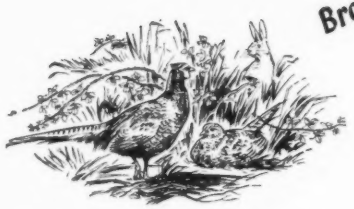
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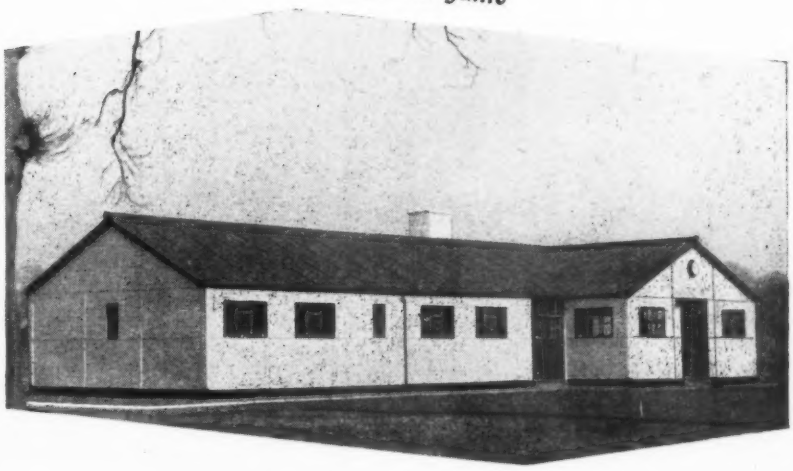


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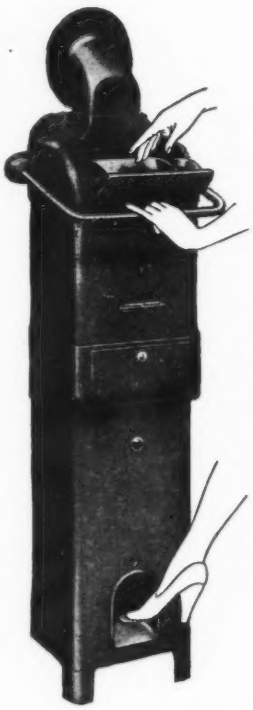
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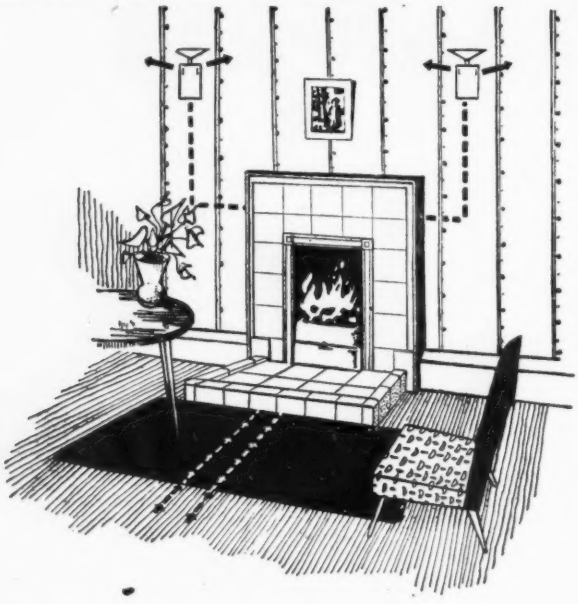


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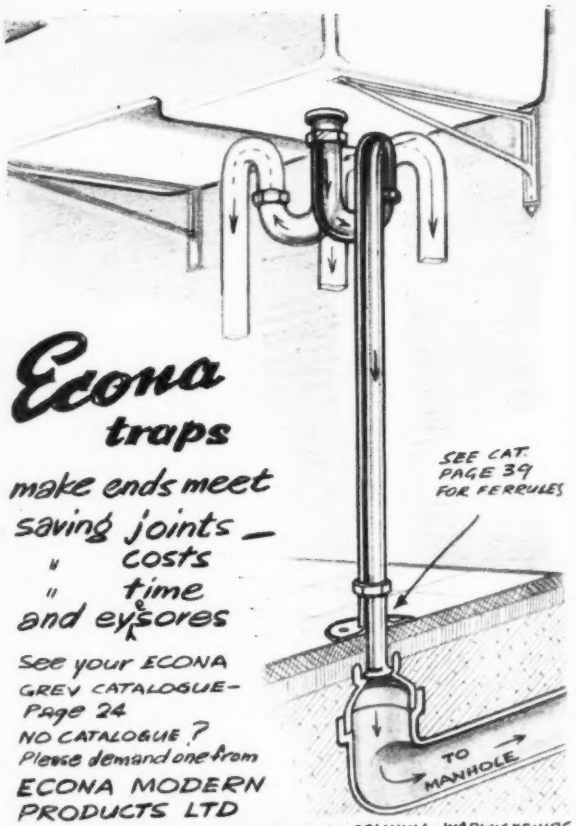
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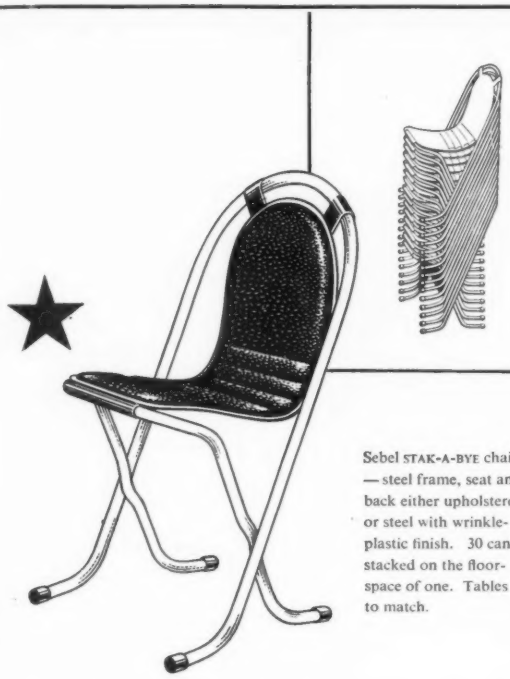
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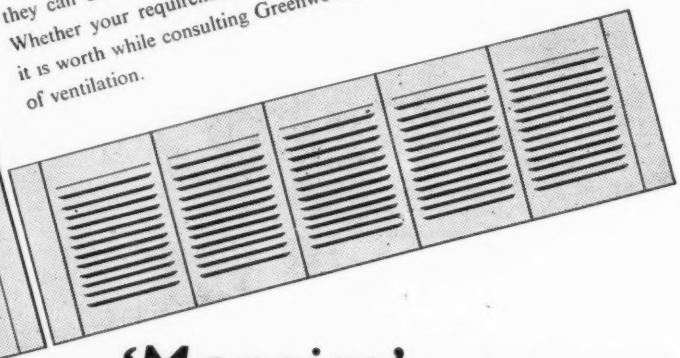
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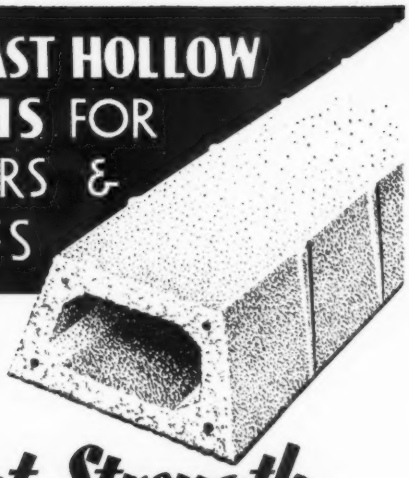
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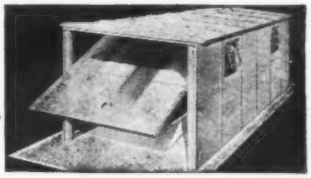
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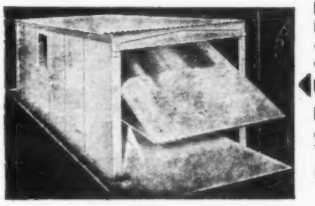
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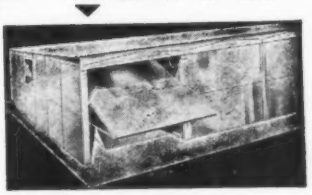
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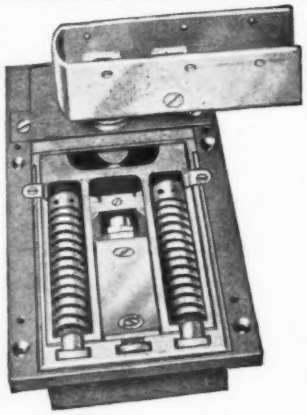
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Solution for the damp walls problem

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Brella contains silicones which repel water without sealing the treated surface.

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★ Will not alter appearance or texture of surface.

Write for details and price:

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ST. PHILIPS, BRISTOL, 2

CLASSIFIED ADVERTISEMENTS

Advertisements should be addressed to the Advt. Manager, "The Architects' Journal," 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, and should reach there by first post on Friday morning for inclusion in the following Thursday's paper.

Replies to Box Numbers should be addressed care of "The Architects' Journal," at the address given above.

Public and Official Announcements

25s. per inch; each additional line, 2s.

HAYES AND HARLINGTON URBAN DISTRICT COUNCIL

Applications are invited for:—

(*a*) ARCHITECTURAL ASSISTANTS (PERMANENT) (two vacancies) within Grade A.P.T. II, *i.e.*, £595—£675 per annum. (*b*) SENIOR ARCHITECTURAL ASSISTANT (TEMPORARY) within Grade A.P.T. IV, *i.e.*, £710—£885 per annum, plus London weighting, in each instance, 21—25 years £20 per annum, 26 years and over £30 per annum. Candidates for (*a*) must have passed the R.I.B.A. Inter. Exam., good experience of housing work with local authority. Housing accommodation will be made available for one of these two appointments if necessary. (*b*) Must be a Registered Architect, have good general experience in design and construction in relation to municipal housing and other works, and capable of supervising large building contracts. Housing accommodation will be made available if necessary. 5-day week. Further particulars and form of application obtainable from the undersigned, which, when completed, must be returned as soon as possible.

GEORGE HOOPER,
Clerk and Solicitor.

Town Hall, Hayes, Middlesex. 1277

BOROUGH OF BUXTON
APPOINTMENT OF ARCHITECTURAL ASSISTANT

Applications are invited for the above permanent appointment at a salary in accordance with the "Special" Grade for Architectural Assistants (£690—£840) per annum.

Applicants must be registered Architects and have had experience in housing and estate development. Preference will be given to those who have passed all or part of the R.I.B.A. examination.

The appointment will be subject to the provisions of the Local Government Act, 1937, and the successful candidate will be required to pass a medical examination.

Canvassing will disqualify, and an applicant who is related to any member or senior official must disclose the fact in his application.

Applications, giving the names of two persons to whom reference may be made, to be delivered to the undersigned not later than 9 a.m. on Wednesday, the 22nd August, 1956.

A. C. W. RYLAND, A.M.I.C.E.,
Borough Engineer.

Town Hall, Buxton, Derbyshire.
26th July, 1956. 1886

COUNTY BOROUGH OF GREAT YARMOUTH
SCHOOLS ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of a TEMPORARY ASSISTANT ARCHITECT within Grade A.P.T. VI (£880—£1,080). The post is superannuable and subject to the National Conditions of Service.

Candidates must be Associate Members of the R.I.B.A. and should have experience in design, alterations and construction of schools. Previous knowledge of schools for partially deaf and blind children will be an advantage.

Housing accommodation will be made available if required and the post is guaranteed for a minimum of two years.

Applications stating age, qualifications, experience, with details of past and present appointments, together with the names of two referees, should reach the Schools' Architect, 22, Euston Road, Great Yarmouth, by 17th August, 1956.

D. G. FARROW,
Chief Education Officer.

22, Euston Road,
Great Yarmouth. 1897

COUNTY BOROUGH OF DERBY
BOROUGH ARCHITECT'S DEPARTMENT

ARCHITECTURAL STAFF:

(*a*) A.P.T. Grade IV (£710—£885 per annum).
(*b*) A.P.T. Grade III (£640—£765 per annum).
(*c*) A.P.T. Grade II (£595—£675 per annum).
(*d*) A.P.T. Grade I (£530—£610 per annum).
(*e*) Higher General Division (£180—£500 per annum).

QUANTITY SURVEYING STAFF:

(*f*) A.P.T. Grade V (£795—£970 per annum).

Commencing salary will be according to qualifications and experience.

Permanent superannuable appointments subject to one month's notice and to medical examination. National Conditions of Service.

Applicants must state for which post they are applying.

Application forms obtainable from and to be returned to The Borough Architect, The Council House, Corporation Street, Derby, not later than Monday, 27th August, 1956.

G. H. EMLYN JONES,
Town Clerk.

30th July, 1956. 1918

The CHESHAM URBAN DISTRICT COUNCIL requires an ARCHITECTURAL ASSISTANT wishing to obtain experience in Municipal work. He will be engaged primarily upon the reconstruction of Council Offices and other capital works. Candidates should have passed the R.I.B.A. Intermediate Examination or possess equivalent qualification from a recognised School of Architecture. Remuneration on the scale A.P.T. IV (£710×£35—£885). The post is superannuable and subject to the N.J.C. conditions. Housing accommodation is made available when required. Further particulars available from the Engineer and Surveyor.

Applications, disclosing any relationship to a member or senior official of the Council, and giving the names of two referees to whom reference can be made, should be addressed to the Clerk of the Council, Council Offices, Chesham, Bucks., not later than Monday, 27th August, 1956. 1888

SOUTH EASTERN GAS BOARD
ARCHITECTURAL ASSISTANT
Architect and Surveyor's Department,
Katharine Street, Croydon

Candidates must have a sound architectural training and be able to prepare specifications. Salary within the range £700—£780 p.a.

Applications in writing, quoting reference V16/615 and giving full details should reach the undersigned within ten days after the publication of this notice.

R. J. McCRAE,
Personnel Manager.

Katharine Street,
Croydon. 1807

BOROUGH OF SOLIHULL
ASSISTANT QUANTITY SURVEYORS
(A.P.T., Grade IV, £710×£35 to £885)

Applications are invited for the above-mentioned posts in the Borough Engineer and Surveyor's Department.

Solihull has a population of 82,000, which is to increase to 100,000 over the next few years, and the appointments are primarily in connection with the large programme of work which is in hand as a result of the rapid expansion of the Borough.

No application forms are being issued, but the Borough Engineer will be pleased to answer specific questions regarding the position.

Commencing salary may be fixed at the appropriate stage within the Grade, according to qualifications and experience.

Applications, giving the names of two referees, should be sent to the Borough Engineer and Surveyor, 90, Station Road, Solihull, not later than Tuesday, 21st August, 1956.

The appointments are subject to Local Government Superannuation Acts, the National Scheme of Conditions of Service, and one month's notice on either side.

Where applicable, housing accommodation may be made available as soon as possible.

W. MAURICE MELL,
Town Clerk.

18th July, 1956. 1859

WANTED

Applications are invited for the post of ASSISTANT GOVERNMENT TOWN PLANNER (Temporary) in the Department of Town and Country Planning, Ceylon, in the scale of £1,000—£ of £40—£1,200 per annum.

Further particulars and forms of application may be obtained from the office of the High Commissioner for Ceylon in the United Kingdom, 13, Hyde Park Gardens, London, W.2.

Applications for the above post should reach the High Commissioner for Ceylon in the United Kingdom on or before Friday, 31st August,

13, Hyde Park Gardens, W.2.
27th July, 1956. 1907

CARDIGANSHIRE COUNTY COUNCIL

Applications are invited for the post of PRINCIPAL ASSISTANT ARCHITECT (A.P.T. Grade VI, £880×£40—£1,080) in the County Architect's Department, County Hall, Aberayron.

Applicants should be Members of the R.I.B.A., with good experience in the design and construction of modern buildings.

The successful person will be in charge of the Drawing Office and will have general responsibility for the Department in the absence of the County Architect and his Deputy.

Forms of application and further details obtainable from the County Architect.

Applications to be returned to the undersigned by not later than 20th August, 1956.

J. E. R. CARSON,
Clerk of the Cardiganshire County Council.

Swyddfa'r Sir, Marine Terrace,
Aberystwyth, Cards. 1841

COUNTY BOROUGH OF TYNEMOUTH
BOROUGH SURVEYOR'S DEPARTMENT

Applications are invited for the following posts:—

SENIOR TOWN PLANNING ASSISTANT
A.P.T. V £795—£970

ARCHITECTURAL ASSISTANT
A.P.T. III (Special) £690—£840

Application forms together with conditions of appointment should be obtained from D. M. O'Herlihy, Esq., O.B.E., B.Sc.(Eng.), M.I.C.E., 16, Northumberland Square, North Shields, and returned before 1st September, 1956.

The Corporation may be prepared to assist in the provision of housing accommodation.

(Signed) F. G. EGNER,
Town Clerk.

1954

KUMASI COLLEGE OF TECHNOLOGY
(*Principal:* W. E. DUNCANSON, Ph.D., D.Sc., F.Inst.P., A.M.I.E.E.)

Applications are invited for the following posts:—

TWO ARCHITECTS to design and supervise erection of College buildings. Mr. A. E. Williamson, A.R.I.B.A., Dip.T.P., A.M.T.P.I., Senior Architect, is in charge of the work in the Architects' office, which includes projects for Students' Halls of Residence, Laboratories and Teaching and Residential buildings. Candidates must be members of the R.I.B.A. The appointments will be on contract for a minimum period of 2 tours of 12-18 months each.

Salary scales (including contract addition): £1,050—£2,020 per annum, plus 5½ non-pensionable addition pending revision of the scale, plus gratuity of £37 10s. for each 3 months' satisfactory service. Initial salary according to experience. A candidate age 28 or over with 5 years' experience after election to the Associateship of the R.I.B.A. would enter the scale at £1,600 per annum. Houses with basic furniture provided at moderate rental. Free 1st class passages to and from Gold Coast once each way for each tour of service, for persons appointed, wives and up to 3 children under 17. Generous home leave on full salary after each tour.

Further information may be obtained from the Secretary, Advisory Committee on Colonial Colleges, 1, Woburn Square, London, W.C.1, to whom applications (6 copies) giving details of education, qualifications and experience and naming three referees should be sent by 31st August, 1956. 1939

SKEGNESS URBAN DISTRICT COUNCIL
ARCHITECTURAL ASSISTANT

Applications are invited from suitably qualified persons for the appointment of Architectural Assistant in the Engineer and Surveyor's Department, within the salary scale £690 × £30—£840 per annum.

The appointment will be subject to the National Scheme of Conditions of Service, the provisions of the Local Government Superannuation Acts, and the passing of a medical examination.

Applicants should have had experience in the preparation of plans designs, details, specifications, etc., for the architectural work undertaken by an Urban Authority.

A flat on a service tenancy is available for the successful candidate, if required.

Applications, suitably endorsed, together with names and addresses of two referees, to be delivered to the undersigned not later than 18th August, 1956. Candidates should disclose whether they are related to any member or officer of the Council.

IVOR M. CULE,
Clerk to the Council.

Town Hall,
Skegness.
27th July, 1956. 1902

TOWN PLANNING ASSISTANT required by HAYES & HARLINGTON U.D.C. Salary within Grade A.P.T. I (£530—£610 p.a., plus appropriate London weighting). Candidates must be capable of the preparation of plans, maintenance of Town Planning records, and after training undertaking other Town Planning duties. Experience in similar duties with a local authority an advantage. Further particulars and form of application obtainable from the undersigned, which when completed must be returned by 27th August, 1956.

GEORGE HOOPER,
Clerk and Solicitor.

Town Hall, Hayes, Middx. 1858

STAFFORDSHIRE COUNTY COUNCIL
EDUCATION ARCHITECT'S DEPARTMENT
ASSISTANT INSPECTOR OF BUILDINGS

Applications are invited for the post of Assistant Inspector of Buildings in the South West Divisional Area, based at Dudley, from persons having practical experience in the building trade, the preparation of specifications and estimates, and who are car owners. Salary will be in accordance with Grade A.P.T. II (£595—£675 per annum).

Forms of application, which must be returned within 10 days from the date of this advertisement may be obtained from: A. C. H. Stillman, F.R.I.B.A., County Education Architect, Green Hall, Lichfield Road, Stafford.

T. H. EVANS,
Clerk of the County Council.

1933

NORTHERN IRELAND HOUSING TRUST
SENIOR ASSISTANT ARCHITECT

The Trust invites applications for the post of Senior Assistant Architect on the salary scale £960 × £30—£1,050 × £10—£1,060.

Candidates must be Associate Members of the Royal Institute of British Architects and should have considerable experience.

Preference will be given to ex-service candidates.

The person appointed will be required to participate in a contributory superannuation scheme which allows for the reciprocal transfer of benefits in Local Government Schemes in suitable cases.

Assistance in obtaining housing accommodation may be given in suitable circumstances to the successful candidate.

Please apply not later than 25th August, 1956, giving full details of age, education, qualifications and experience, including present post and salary, to the General Manager, Northern Ireland Housing Trust, 12, Hope Street, Belfast.

Please mark envelope 33/55. 1938

LINDSEY COUNTY COUNCIL
PLANNING DEPARTMENT

Applications are invited for the following appointments:—

(*a*) SENIOR ASSISTANT (Architectural), A.P.T., Grade IV (£710—£885).

(*b*) JUNIOR ASSISTANT, A.P.T. Grade I (£530—£610).

Both appointments at Headquarters—Lincoln. Candidates for (*a*) should be suitably qualified and have some experience in redevelopment schemes, layouts and architectural control. Officer to provide own car for official journeys, for which an allowance will be paid at essential user's rate for car not exceeding 10 h.p. or 1,199 c.c. (Application of latest N.J.C. rates under consideration.) Candidates for (*b*) must have trained in planning, architect's or surveyor's office, and be good draughtsman, with experience in field surveys.

Superannuation and N.J.C. conditions of service as approved by the County Council. Canvassing will disqualify. Relationship to any member or senior officer of the Council to be disclosed in writing by applicants.

Applications, with particulars of age, training, experience, and names of two referees, to County Planning Officer, The Castle, Lincoln, not later than 17th August, 1956. 1862

LANCASHIRE COUNTY COUNCIL

Applications are invited for appointments as PLANNING ASSISTANTS at the following divisional offices:—

WIGAN—A.P.T. Grades IV/V (£710—£970).

ACCRINGTON & LIVERPOOL—A.P.T. Grade IV (£710—£885).

MANCHESTER—salary within £690—£885.

Applicants should possess a recognised qualification in architecture, surveying, engineering and/or town planning. The commencing salary for successful candidates will be according to qualifications and experience.

Applications stating appointment applied for, giving age, qualifications, present appointment, experience, etc., and two referees to the County Planning Officer, East Cliff County Offices, Preston, by 20th August, 1956. 1930

BOROUGH OF UXBRIDGE
ASSISTANT ARCHITECT

Applications are invited for the appointment of an Assistant Architect on the staff of the Borough Surveyor and Architect at a salary within A.P.T. Grades II and IV, *viz.*, £625 to £915 per annum including London weighting at age 26 or over. The commencing salary will be dependent on qualifications and experience. Applicants should have had a good architectural training and experience. The appointment will be subject to the National Scheme of Conditions of Service, the Local Government Superannuation Acts and the passing of a medical examination. Applications stating age, marital state, present and previous appointments, qualifications and experience and giving the names and addresses of three referees, should be forwarded to Harold E. G. Stripp, F.R.I.C.S., M.Inst.R.A., Borough Surveyor and Architect, 263, High Street, Uxbridge, not later than 15th August next. Housing accommodation will be made available if required. Candidates are required to disclose in writing whether to their knowledge they are related to any member or senior officer of the Council.

JOHN POOLE,
Town Clerk.

1908

CRICKLADE AND WOOTTON BASSETT RURAL DISTRICT COUNCIL
AMENDED ADVERTISEMENT FOR THE APPOINTMENT OF ENGINEERING AND SURVEYING ASSISTANT

Applications are invited for the appointment of Engineering and Surveying Assistant to the Engineer and Surveyor, Mr. J. C. Grindley, A.M.I.C.E., A.R.I.C.S., M.I.Mun.E., A.M.T.P.I., at a commencing salary of £690 per annum in accordance with Grade A.P.T. III and proceeding into Grade A.P.T. IV (£780—£885).

The appointment will be subject to the provisions of the Local Government Superannuation Acts and the National Joint Council Conditions of Service and to the successful candidate passing a medical examination.

Preference will be given to applicants who have had experience in housing works.

Applications endorsed "Engineering and Surveying Assistant" stating age, qualifications, and experience together with copies of not more than three recent testimonials, should reach the undersigned not later than Tuesday, the 4th September, 1956.

W. J. HOSIER,
Clerk of the Council.

Council Offices,
Manor House,
Wootton Bassett,
Swindon Wilts.
30th July, 1956. 1915

METROPOLITAN BOROUGH OF BATTERSEA

Appointment of TWO ASSISTANT ARCHITECTS, A.P.T. V (£795×£35 to £970 per annum, plus London weighting).

Applications are invited for the above-mentioned permanent appointments. Applicants should be Associates of the R.I.B.A. and have had several years' office experience. Successful applicants will be engaged on a large programme of new construction and redevelopment.

Application forms from the Borough Engineer and Surveyor, Town Hall, S.W.11. Closing date: 20th August. 1866

URBAN DISTRICT COUNCIL OF BASILDON
ARCHITECTURAL ASSISTANT
GRADE A.P.T. III (£640—£765 p.a.)

Applications are invited for the above established post in the Engineer and Surveyor's Department.

Commencing salary according to experience and qualifications. Inter. R.I.B.A. or equivalent required. Housing considered.

The Urban District has a population of 59,000, covers 27,000 acres and includes the New Town area and 2 Townships designated as Expanded Towns. Rapid development will provide an increasing variety of interesting work.

Full particulars and application forms from and returnable to Mr. S. A. Wadsworth, A.M.I.C.E., A.M.I.Mun.E., Council Offices, High Street, Billericay, Essex. Closing date 25th August, 1956. 1957

AYCLIFFE DEVELOPMENT CORPORATION
CHIEF ARCHITECT'S DEPARTMENT
ARCHITECTURAL ASSISTANT A.P.T. IV
(£710×£35—£885 p.a.)

Applications are invited for the above post from persons approaching the final standard of the R.I.B.A. Applicants should have had at least three years' varied experience.

Appointment subject to N.J.C. conditions, superannuation and medical examination.

Housing accommodation provided if necessary.

Applications stating age, qualifications and experience together with the names of two referees to arrive not later than 25th August, 1956.

A. V. WILLIAMS,
General Manager.

Newton Aycliffe,
nr. Darlington,
Co. Durham. 1958

KUMASI COLLEGE OF TECHNOLOGY
(*Principal:* W. E. Duncasson, Ph.D., D.Sc., F.Inst.P., A.M.I.E.E.)

Applications are invited for the following posts in the newly created School of Architecture and Building:—

(*a*) HEAD OF DEPARTMENT

Applicants should be qualified Architects. Some experience of tropical architecture desirable.

Pensionable Salary Scale: £1,975 × £50—£2,225, plus a £250 per annum non-pensionable professional allowance, plus a non-pensionable 5% addition to pensionable salary pending revision of the salary scale.

(*b*) 2 LECTURERS IN ARCHITECTURE
1 LECTURER IN BUILDING TECHNOLOGY
1 LECTURER IN TOWN PLANNING

Applicants should have appropriate qualification in Architecture, Building Technology or Town Planning. Tropical experience an advantage.

Pensionable Salary Scale: £1,080 × £40—£1,560 per annum.

Appointments to all the above posts may be made on contract if successful applicants so desire with a 25% increase on the pensionable salary plus a gratuity at the rate of £150 per annum payable at the end of the contract, or arrangements to continue policies initiated under the F.S.S.U. scheme might be made.

Free first-class passages for person appointed, wife and up to three children under 17. Normally annual home leave.

Accommodation with basic furniture will be provided; rent according to pensionable salary.

Applications (six copies) should be submitted to the Secretary, the Advisory Committee on Colonial Colleges of Arts, Science and Technology, 1, Woburn Square, London, W.C.1, giving age, education, qualifications, experience and the names of three referees. Closing date 31st August, 1956. 1940

ARCHITECTURAL ASSISTANTS and ARCHITECTURAL DRAUGHTSMEN required by KENYA GOVERNMENT P.W.D. for one tour of 36/45 months in the first instance on contract with gratuity of 13½% of total substantive salary drawn. Salary scale (including Inducement Pay): Architectural Assistants £879 rising to £1,422 a year. Architectural Draughtsmen £813 rising to £1,341 a year. Commencing salary according to experience. Outfit allowance £40. Free passages. Liberal leave on full salary. Candidates, over 24, must be capable of working up sketch designs and preparing full working drawings for various types of Government buildings ranging from small domestic work to large multi-storied buildings. Candidates for Architectural Assistants must have passed the Intermediate examination of the R.I.B.A., and candidates for Architectural Draughtsmen must have had at least four years' actual experience in an Architect's Office and have a sound knowledge of building construction. Write to the Crown Agents, 4, Millbank, London, S.W.1. State age, name in block letters, full qualifications and experience and quote M2B/40529/AG. 1950

SOUTH EAST METROPOLITAN REGIONAL HOSPITAL BOARD

Applications are invited for the following posts:

(*a*) ARCHITECTURAL ASSISTANT. Salary according to age and experience, £480 (at age 21) —£670 per annum plus London weighting. Applicants must have passed the Intermediate Examination of the R.I.B.A. or equivalent.

(*b*) RECORDS DRAUGHTSMAN (Architectural). Salary according to age £390 (at age 21) —£590 plus London weighting.

The above salaries are now under review.

Above posts superannuable.

Applications stating age, previous experience, etc., with two referees to Secretary, 11, Portland Place, London, W.1, by 18th August, 1956. 1921

DURHAM COUNTY COUNCIL
COUNTY ARCHITECT'S DEPARTMENT
APPOINTMENT OF ASSISTANT ARCHITECTS

In connection with their proposal to erect new County Offices, the Council require a QUALIFIED ARCHITECT to prepare drawings and supervise the erection of the building. The person appointed will be in charge of a small team who, together, will be responsible to the County Architect. Candidates should have a flair for design and must have had experience in the design and construction of multi-storey buildings. Salary £1,175 × £55—£1,405.

Applications are also invited from QUALIFIED ARCHITECTS for appointment on salary scales A.P.T. V (£795 × £35—£970) and A.P.T. VI (£880 × £40—£1,080).

All appointments are subject to medical examinations for the purposes of the Local Government Superannuation Acts, the Council's regulations and the National Joint Council's Scheme for the time being governing payment of salary during sickness, annual leave and other conditions of service.

Applications including the names and addresses of two persons to whom reference may be made must reach the County Architect, South Street, Durham, by 25th August, 1956.

J. K. HOPE,
Clerk of the County Council.

Shire Hall,
Durham.
27th July, 1956. 1935

NATIONAL COAL BOARD
WEST MIDLANDS DIVISION

Applications are invited for posts of Architect Grade II in the Divisional Chief Architect's Department at Fenton, Stoke-on-Trent.

Salary £700 × £30—£1,000.

Applicants must be Associate Members of the Royal Institute of British Architects and have experience in design, preparation of sketch plans, working drawings, specifications and limited supervision of works in progress. The appointments are superannuated and the point of entry into the scale will depend on knowledge and experience.

Office is engaged on a large programme of varied and interesting work of industrial and welfare nature and offers scope for applicants with a progressive outlook.

Superannuation rights under Local Authority and certain other schemes are transferable.

Write for application form to the Divisional Chief Staff Officer, West Midlands Division, National Coal Board, Himley Hall, Nr. Dudley, Worcs, within 14 days of the appearance of this advertisement. 1944

COUNTY BOROUGH OF BOURNEMOUTH
BOROUGH ARCHITECT'S DEPARTMENT

Applications are invited for the appointment of:—

(*a*) ASSISTANT ARCHITECT. Special Salary Scale £690—£840 p.a.

(*b*) ARCHITECTURAL ASSISTANT. Salary Grade A.P.T. II £595—£675 p.a.

(*c*) JUNIOR ASSISTANT QUANTITY SURVEYOR. Salary Grade A.P.T. III £640—£765 p.a.

(*d*) JUNIOR ASSISTANT QUANTITY SURVEYOR. Salary Grade A.P.T. I £530—£610 p.a.

Candidates for post (*a*) must be fully qualified (by examination) members of the R.I.B.A., for post (b) to have had some experience after passing the Intermediate Examination of R.I.B.A., and for posts (*c*) and (*d*) experience in a Quantity Surveyor's office after passing R.I.C.S. Intermediate examination. Successful candidates will be appointed at present salary if within the incremental scale.

Application forms and further particulars from Borough Architect, Town Hall, Bournemouth. Completed applications to reach me by 10 a.m., 25th August, 1956.

A. LINDSAY CLEGG,
Town Clerk.

1943

WANTED

Applications are invited for the post of ASSISTANT GOVERNMENT TOWN PLANNER (Temporary) in the Department of Town and Country Planning, Ceylon, in the scale of £1,000—5 of £40—£1,200 per annum.

Further particulars and forms of application may be obtained from the office of the High Commissioner for Ceylon in the United Kingdom, 13, Hyde Park Gardens, London, W.2.

Applications for the above post should reach the High Commissioner for Ceylon in the United Kingdom on or before Friday, August 31st.

13, Hyde Park Gardens, W.2.
27th July, 1956. 1952

LIVERPOOL REGIONAL HOSPITAL BOARD

ASSISTANT ARCHITECT required for temporary appointment in the Department of the Regional Architect in connection with the design and construction of a new 1,000 bedded Mental Deficiency Hospital.

Salary scale £640 ×£25 (4) × £30 (4) × £35 (2) to £930 p.a. which is subject to a recently negotiated increase of approximately 6 per cent.

The starting salary will be dependent upon age and experience and the appointment will be terminable by one month's notice on either side.

Applications stating age, experience, qualifications, present and past appointments and salary, and names and addresses of three referees (two technical) to me not later than 24th August, 1956.

VINCENT COLLINGE,
Secretary to the Board.

19, James Street,
Liverpool. 2. 1932

MIDDLESBROUGH EDUCATION COMMITTEE
APPOINTMENT OF ARCHITECTURAL STAFF

Under a review of establishment recently approved by the Authority, the following vacancies are open in the office of the Education Architect (K. J. Caton, A.R.I.B.A.).

Appointments will be made within the grades as indicated subject to qualifications and experience.

(*a*) ONE PRINCIPAL ASSISTANT ARCHITECT, A.P.T. Grade VI, £975—£1,080 (responsibilities under the Chief Assistant Architect).

(*b*) TWO SENIOR ASSISTANT ARCHITECTS, A.P.T. Grade V, £795—£970.

(*c*) TWO ASSISTANT ARCHITECTS, A.P.T. Special Grade to Grade IV, £690—£840—£885.

Candidates appointed under posts (*c*) who must have passed the final examination parts I and II would be considered for an accelerated incremental rise on attaining Associate Membership of the R.I.B.A.

Housing accommodation is available for the successful candidates, if required.

Application forms and particulars may be obtained from the Director of Education, Education Offices, Woodlands Road, Middlesbrough, to whom completed forms should be returned not later than Thursday, 30th August, 1956. 1920

BOROUGH OF BEBINGTON
APPOINTMENT OF
(*a*) ASSISTANT ARCHITECT.
(*b*) GENERAL ENGINEERING ASSISTANT.

Applications are invited for the above appointments in the Department of the Borough Engineer and Surveyor each at a salary ranging between £530 and £840 p.a. (*i.e.*, Grade I A.P.T., Grade II A.P.T., or Special Grade) according to qualifications and experience. Minimum requirement for post (*a*) is Inter. R.I.B.A. or equivalent. Charter conditions apply.

The successful candidates if married and in need of housing at the time of appointment will be offered a house by the Council within a reasonable period of time.

Application forms and further particulars may be obtained from the Borough Engineer & Surveyor, "Brackenwood," Higher Bebington.

Canvassing, or an undisclosed relationship to a member or senior officer will disqualify.

Applications are to be sent to the Town Clerk, Municipal Offices, Bebington, Cheshire, not later than 25th August, 1956.

G. CHAPPELL,
Town Clerk.
1931

BOROUGH OF ROYAL LEAMINGTON SPA
APPOINTMENT OF ARCHITECTURAL
ASSISTANT GRADE III

Applications are invited for the above post at a salary in accordance with A.P.T. Grade III (£640—£765). Applicants should have a thorough knowledge of building construction and capable of estimating and taking off simple quantities. The work will be of an interesting and varied nature and experience in the design of small factory units would be an advantage.

Forms of application are obtainable from the Borough Engineer at the Town Hall, and these should be returned to reach him not later than August 21st, 1956.

JAMES N. STOTHERT,
Town Clerk.

Town Hall,
Leamington Spa. 1923

BOROUGH OF WATFORD
APPOINTMENT OF ARCHITECTURAL
ASSISTANT

Applications are invited for the above appointment at a salary within Grade A.P.T. II (£595—£675) per annum.

Forms of application returnable by 17th August, 1956.

F. C. SAGE.
Borough Engineer, Surveyor & Architect.
Town Hall,
Watford. 1924

METROPOLITAN BOROUGH OF LEWISHAM
ASSISTANT ARCHITECT

Salary scale £700 rising to £870 p.a. (N.J.C. Special Scale plus London weighting.) Commencing salary according to experience and qualifications. Particulars and forms of application from Town Clerk, Lewisham Town Hall, Catford, S.E.6. Closing date 1st September, 1956. 1947

BEDFORDSHIRE COUNTY COUNCIL

Applications are invited for the posts of ASSISTANT ARCHITECT, A.P.T. Grade V (£795—£970), and ARCHITECTURAL ASSISTANTS, A.P.T., Grade II (£595—£675) and A.P.T. Grade I (£530—£610), in the County Architect's Department. Application forms from County Architect, Shire Hall, Bedford, to be returned by 20th August, 1956. 1871

BOROUGH OF EALING—TOWN PLANNING ASSISTANT, A.P.T. III (£640—£765 per annum, plus London weighting). Full particulars and application form from Borough Surveyor, Town Hall, Ealing, W.5. Closing date 20th August, 1956.

E. J. COPE-BROWN,
Town Clerk.
1917

Coventry Corporation require ARCHITECTS.
(*a*) A.P.T. V (£795—£970).
(*b*) Special Grade (£690—£840).
Additional local award £26 in certain circumstances on salary up to £795. Housing accommodation may be available. Application forms and details from City Architect and Planning Officer, Bull Yard, Coventry, returnable by 24th August. 1922

Architectural Appointments Vacant

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ARCHITECTURAL ASSISTANT required, approaching Finals, with at least one year's office experience. Box 1896.

A PRIVATE Office has several vacancies for ARCHITECTS interested in new building techniques. Previous experience not essential, and work will include the research and development of standard structural and building elements.—Apply A. M. Gear, F.R.I.B.A., 12, Manchester Square, London, W.1. 1927

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(*b*) ASSISTANT ARCHITECTS, capable of preparing working drawings from preliminary details.
(Salary range £550 to £820 per annum.)

There is a five-day week in operation, and both appointments offer prospects of upgrading.

Applications, stating age, experience, qualifications and salary required, to G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4. 3871

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(*b*) ASSISTANT ARCHITECTS, capable of preparing working drawings and details from preliminary sketches.
(Salary range £550 to £820 per annum.)

Both appointments offer prospects of upgrading.

(*c*) ASSISTANT QUANTITY SURVEYOR, capable of working-up and taking-off under supervision.
(Salary range £550 to £820 per annum.)

Applications, stating age, experience, qualifications, and salary required, to G. S. Hay, A.R.I.B.A., Chief Architect, Co-operative Wholesale Society, Ltd., 1, Balloon Street, Manchester, 4. 3872

IF you are qualified and think that a knowledge of construction and good draughtsmanship are not incompatible with good design and that administration is not the essence of architecture, write to Box 1784, stating details of your career and salary required.

CROYDON.—ARCHITECTURAL ASSISTANT required immediately for interesting and varied work. Inter./Final standard; capable of running small contracts.—Write age, experience, and salary required, to George Lowe & Partner, 4, High Street, Croydon, Surrey. 1951

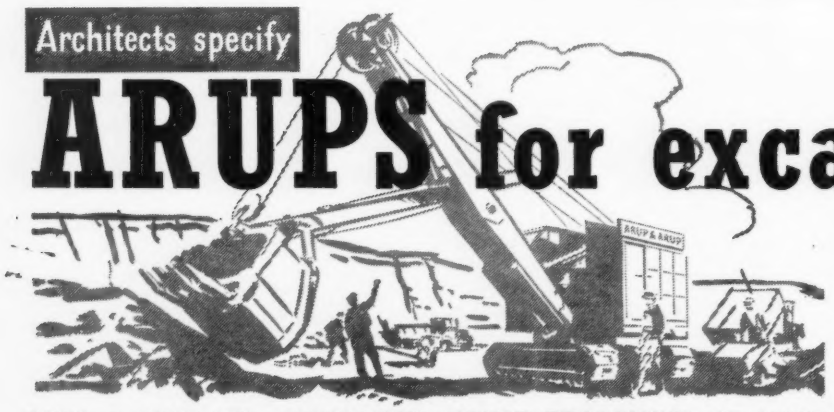
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ASSISTANTS AND DRAUGHTSMEN (Male and Female) required in busy West End office. Some assistants required now; others Sept./Oct. Applicants must be competent draughtsmen, but office experience desirable but not essential. Excellent opportunities for gaining all-round experience. Good salaries and bonus. Overtime paid at 50% over basic rates. Welch & Lander, 38, Gloucester Place, W.1. Welbeck 6651. 1874

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Applications, stating age, marital status, qualifications and details of experience, together with names and addresses of three persons as references, should be sent to Supervisor, Personnel Department, Central Mortgage and Housing Corporation, Head Office, Ottawa, Ontario, Canada. 1865

NORTH WALES. SENIOR ASSISTANT, not necessarily qualified, required for Mold office of F. C. Roberts, B.Arch., F.R.I.B.A., Earl Chambers, Mold. Interesting and varied practice. Applicants must be good draughtsmen and with previous office experience. Write to above address stating age, experience and salary expected. 1893

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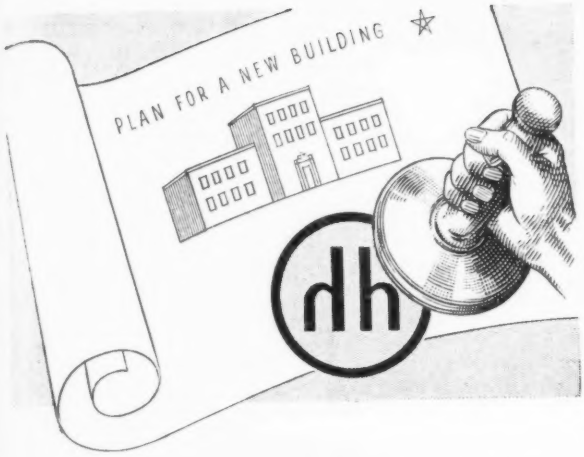
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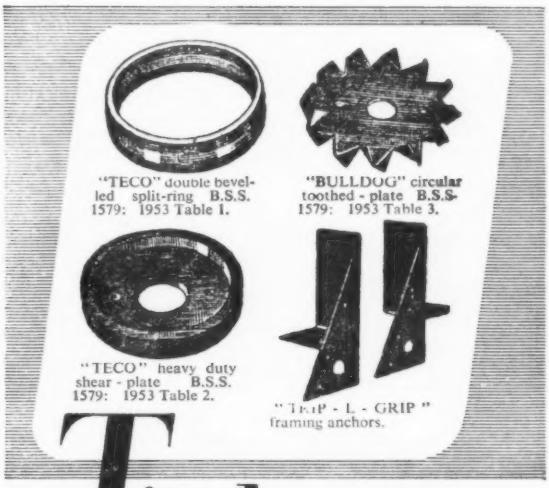
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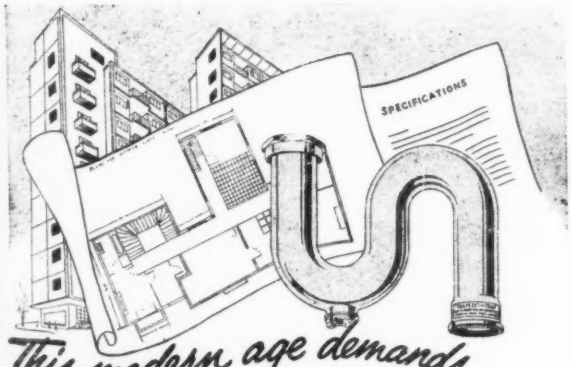
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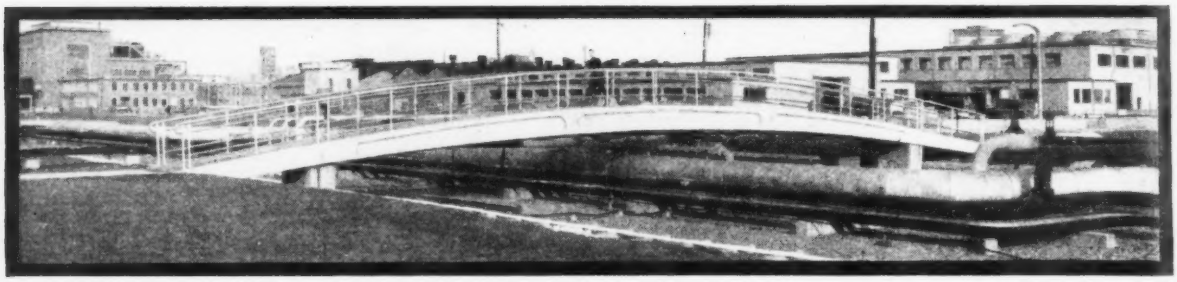
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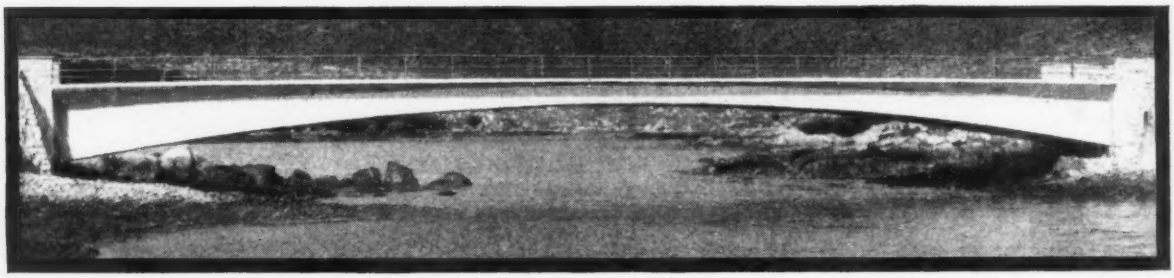
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Printed in Great Britain for the Proprietors of "THE ARCHITECTS' JOURNAL" (The Architectural Press Ltd.), 9, 11 and 13, Queen Anne's Gate, Westminster, S.W.1, by HARRISON & SONS LTD., by Appointment to Her Majesty The Queen, Printers, London, Hayes (Middx.), and High Wycombe.
Editorial illustrations engraved by THE ENGRAVERS' GUILD LTD., Windsor House, 23/26, Cursitor Street, London, E.C.4.